AAMRL-TR-90-008

EVALUATION OF THE CRITERION TASK SET - PART I APPENDICES A AND B - UNIVARIATE SUMMARIES (U)

Robert E. Schlegel, Ph.D.
Kirby Gilliland, Ph.D.

THE UNIVERSITY OF OKLAHOMA

JANUARY 1990

FINAL REPORT FOR MAY 1988 - MAY 1989

HARRY G. ARMSTRONG AEROSPACE MEDICAL RESEARCH LABORATORY
HUMAN SYSTEMS DIVISION
AIR FORCE SYSTEMS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-6573

NOTICES

When US Government drawings, specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government thereby incurs no responsibility nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise, as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Please do not request copies of this report from the Armstrong Aerospace Medical Research Laboratory. Additional copies may be purchased from:

National Technical Information Service
5285 Port Royal Road -
Springfield, Virginia 22161

Federal Government agencies and their contractors registered with the Defense Technical Information Center should direct requests for copies of this report to:

Defense Technical Information Center
Cameron Station
Alexandria, Virginia 22314

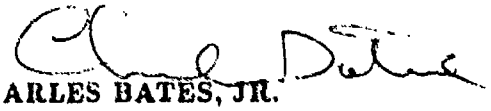
TECHNICAL REVIEW AND APPROVAL

AAMRL-TR-90-008

This report has been reviewed by the Office of Public Affairs (PA) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report has been reviewed and is approved for publication.

FOR THE COMMANDER



CHARLES BATES, JR.
Director, Human Engineering Division
Armstrong Aerospace Medical Research Laboratory

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified	1b. RESTRICTIVE MARKINGS
2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE	
4. PERFORMING ORGANIZATION REPORT NUMBER(S)	5. MONITORING ORGANIZATION REPORT NUMBER(S) AAMRL-TR-90-008
6a. NAME OF PERFORMING ORGANIZATION The University of Oklahoma 6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION Harry G. Armstrong Aerospace Medical Research Laboratory
6c. ADDRESS (City, State, and ZIP Code) 1000 Asp, Room 314 Norman, Oklahoma 73019	7b. ADDRESS (City, State, and ZIP Code) Wright-Patterson Air Force Base, Ohio 45433-6573
8a. NAME OF FUNDING / SPONSORING ORGANIZATION 8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER F33615-85-D-0540
8c. ADDRESS (City, State, and ZIP Code)	10. SOURCE OF FUNDING NUMBERS

PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
62202F	7814	00	13

11. TITLE (Include Security Classification)
Evaluation of the Criterion Task Set - Part I, Appendices A and B - Univariate Summaries (U)

12. PERSONAL AUTHOR(S)
Schlegel, Robert E. Ph.D. and Gilliland, Kirby Ph.D.

13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Year, Month, Day)	15. PAGE COUNT
Final	FROM May 88 TO May 89	1990 January	260

16. SUPPLEMENTARY NOTATION
*Subcontract to Southeastern Center for Electrical Engineering Education, Central Florida Facility, 1101 Massachusetts Avenue, St. Cloud, Florida 32769

17. COSATI CODES		
FIELD	GROUP	SUB-GROUP
05	08	
23	02	

18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
Human Performance, Task Battery, Cognition, (Stress)

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

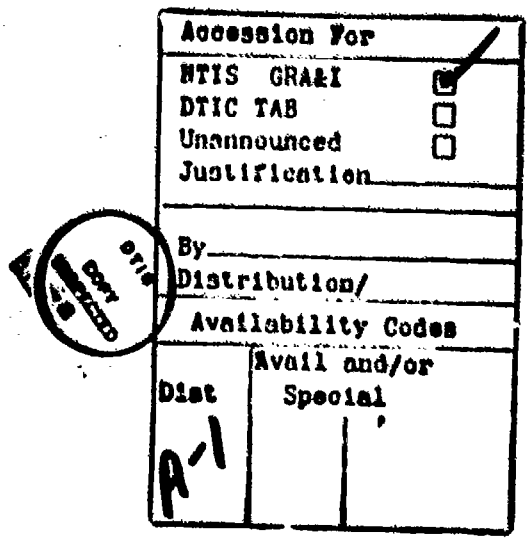
This report summarizes the development and analysis of a comprehensive standardization data base for the USAF Criterion Task Set (CTS). The CTS is a collection of standardized loading tasks developed by the Harry G. Armstrong Aerospace Medical Research Laboratory as a mental workload metric evaluation tool (see AAMRL-TR-84-071). The effort reported in this document was conducted by the University of Oklahoma. Performance data, Subjective Workload Assessment Technique (SWAT) Data, and individual difference measures were collected and are reported for 123 subjects (95 men, 28 women) for all nine tasks of the CTS Version 1.0. Part I of the Final Report (this document) details the experimental procedures for developing the data base and summarizes the performance data and SWAT ratings with respect to task difficulty levels, learning rates, stability of the measures, gender and SWAT prototype differences, and intertask relationships. As a basis of comparison, the data in this report should be of value to others using the Criterion Task Set to evaluate human information processing performance. (Keywords)

20. DISTRIBUTION / AVAILABILITY OF ABSTRACT	21. ABSTRACT SECURITY CLASSIFICATION
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS	Unclassified

22a. NAME OF RESPONSIBLE INDIVIDUAL	22b. TELEPHONE (Include Area Code)	22c. OFFICE SYMBOL
GARY B. REID	(513) 255-8749	AAMRL/HEG

DD Form 1473, JUN 86 — Previous editions are obsolete. — SECURITY CLASSIFICATION OF THIS PAGE

TABLE OF CONTENTS



Appendix A-1

Univariate Summaries - Continuous Recall

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=LOW

UNIVARIATE

VARIABLE=CRMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	960.329	SUM	236241
STD DEV	318.184	VARIANCE	101241
SKEWNESS	1.49211	KURTOSIS	2.67806
USS	251673139	CSS	24803992
CV	33.1328	STD MEAN	20.2866
T:MEAN=0	47.338	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.117013	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	2161	99%	2129.49
75% Q3	1078	95%	1643.15
50% MED	877.5	90%	1382.9
25% Q1	745	10%	648.4
0% MIN	428	5%	587.7
		1%	472.23
RANGE	1733		
Q3-Q1	333		
MODE	673		

EXTREMES

LOWEST	ID	HIGHEST	ID
428(	38)	1978(	65)
468(	38)	2103(	70)
477(	20)	2112(	79)
532(	54)	2145(	60)
562(	138)	2161(	70)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=LOW

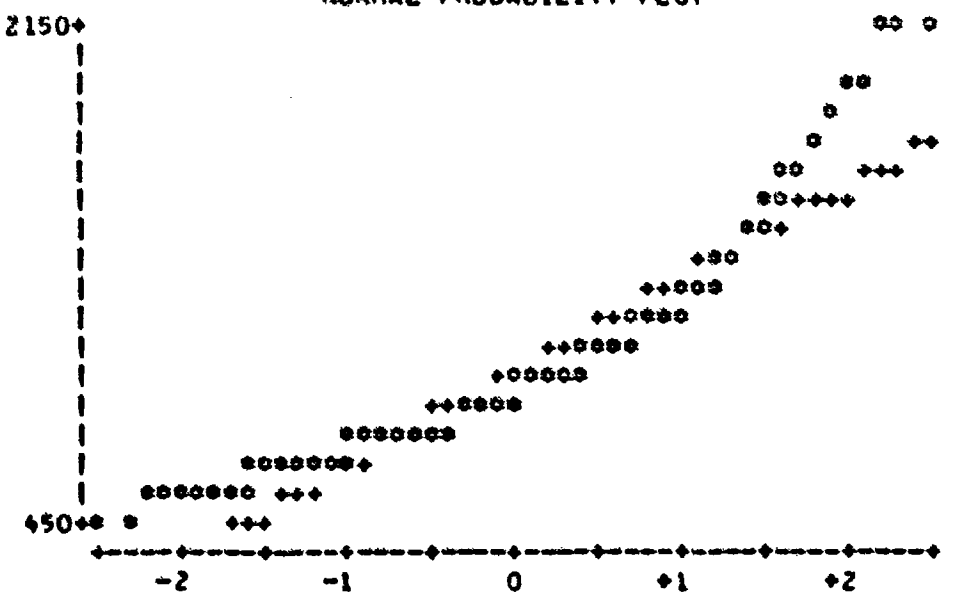
UNIVARIATE

VARIABLE=CRMNO

STEM	LEAF	#	BOXPLOT
21	0146	4	o
20			
19	28	2	0
18	46	2	0
17	67	2	0
16	457	3	0
15	0222	4	|
14	023669	6	|
13	0367888	7	|
12	00012457789	11	|
11	1223444556677888	16	|
10	001122223333334444455667778899 9	31	+------+
9	011122222233333445555666778888999	32	| + |
8	001111112222223333444566666777777777899	38	o------o
7	000011112223333344444555555677777777788889999999	48	+------+
6	011122234556677777888888999	26	|
5	36677888999	11	|
4	378	3	|

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=LOW

UNIVARIATE

VARIABLE=CRPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.963754	SUM	237.083
STD DEV	0.0496317	VARIANCE	0.0024633
SKEWNESS	-3.10482	KURTOSIS	11.767
USS	229.094	CSS	0.603509
CV	5.14983	STD MEAN	0.0031644
T:MEAN=0	304.562	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.232603	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.991852	95%	1
50% MED	0.980132	90%	1
25% Q1	0.957879	10%	0.916257
0% MIN	0.670886	5%	0.858723
		1%	0.709778
RANGE	0.329114		
Q3-Q1	0.0339736		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.670886(	138)	1(	91)
0.688889(	138)	1(	91)
0.733333(	124)	1(	93)
0.78453(	108)	1(	110)
0.78733(	50)	1(	129)

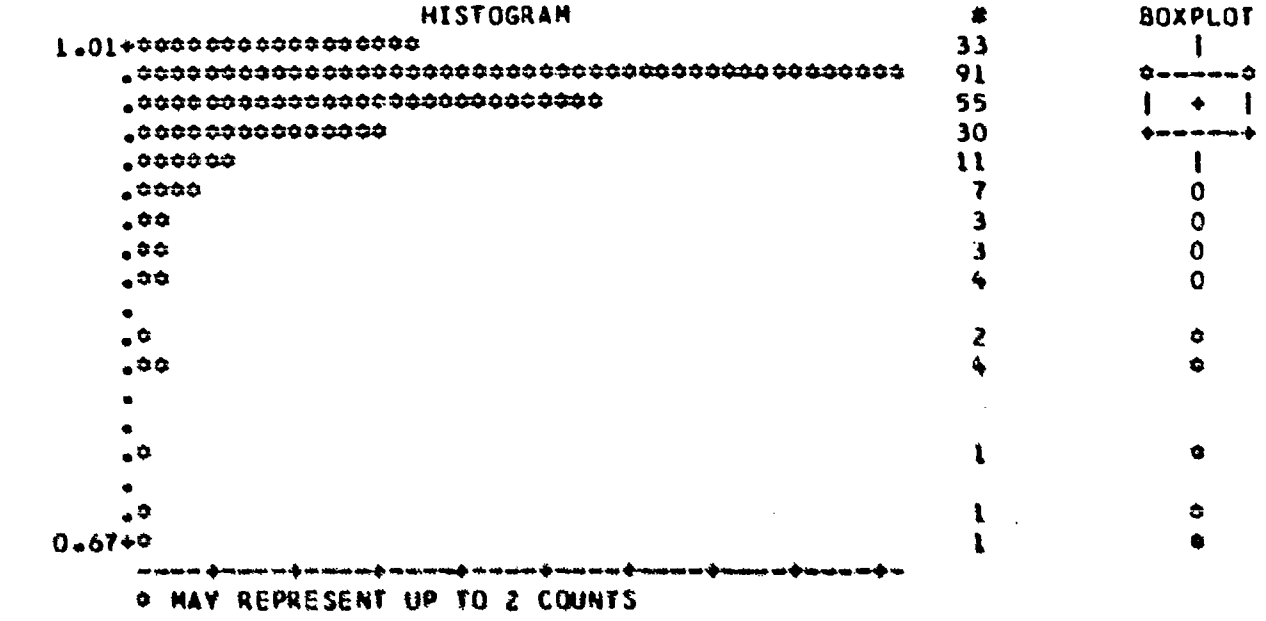
USAF/SCEEE LARGE-SCALE CTS STUDY

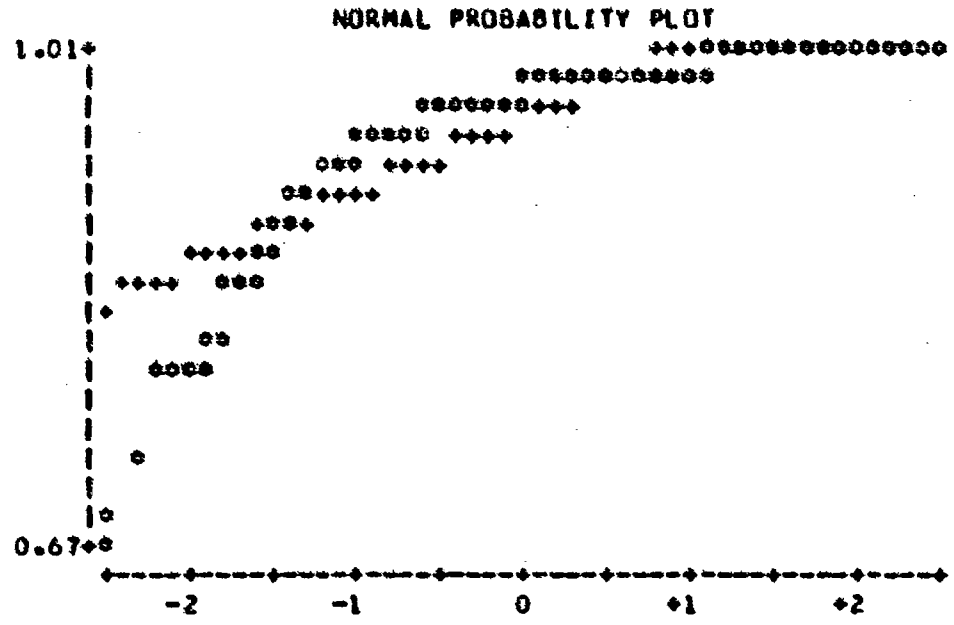
UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=LOW

UNIVARIATE

VARIABLE=CRPCO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=CRMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	2105.28	SUM	517898
STD DEV	828.51	VARIANCE	686429
SKEWNESS	0.836097	KURTOSIS	1.9334
USS	1258493556	CSS	168175107
CV	39.354	STD MEAN	52.8239
T:MEAN=0	39.8546	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
D:NORMAL	0.0575483	PROB>D	0.046

QUANTILES(DEF=4)

100% MAX	6127	99%	4548.64
75% Q3	2554.75	95%	3617.1
50% MED	2023.5	90%	3192.9
25% Q1	1521	10%	1121.6
0% MIN	260	5%	919.3
		1%	516.1
RANGE	5867		
Q3-Q1	1033.75		
MODE	1446		

EXTREMES

LOWEST	ID	HIGHEST	ID
260(	138)	4067(	85)
502(	122)	4092(	65)
532(	122)	4396(	44)
545(	50)	4684(	60)
548(	148)	6127(	44)

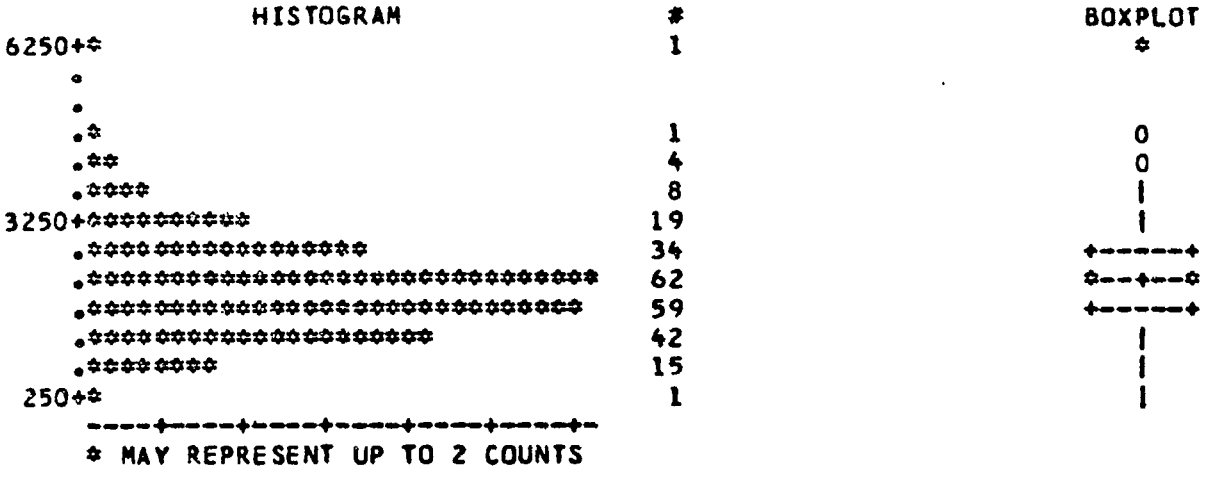
USAF/SCEEE LARGE-SCALE CTS STUDY

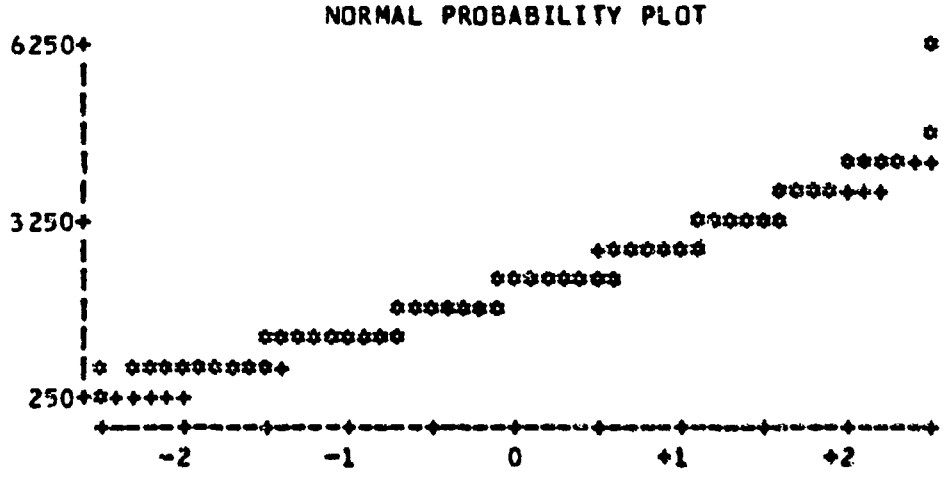
UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=CRHNO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=CRPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.870397	SUM	214.118
STD DEV	0.133873	VARIANCE	0.0179219
SKEWNESS	-0.982869	KURTOSIS	-0.0785612
USS	190.758	CSS	4.39087
CV	15.3807	STD MEAN	0.00853542
T:MEAN=0	101.975	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
D:NORMAL	0.190657	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.980629	95%	1
50% MED	0.933333	90%	1
25% Q1	0.765506	10%	0.662043
0% MIN	0.466667	5%	0.597264
		1%	0.473429
RANGE	0.533333		
Q3-Q1	0.215123		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.466667(	70)	1(	115)
0.472222(	124)	1(	117)
0.47479(	138)	1(	127)
0.539326(	120)	1(	127)
0.56338(	2)	1(	128)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=CRPCO

STEM	LEAF	#	BOXPLOT
100	0000000000000000000000000000000000	33	
98	11122233444455555567777888991	29	
96	02446890011123334456667799	26	
94	01266888900133457778899	25	
92	01125790023356888899	21	
90	3456691578	10	
88	72459	5	
86	055	3	
84	3550255	7	
82	789991167	9	
80	3379689	7	
78	166456	6	
76	011112346458	12	
74	1342	4	
72	4467111	7	
70	2370248	7	
68	2371669	7	
66	22776	5	
64	04572	5	
62	00844	5	
60			
58	19478	5	
56	3613	4	
54			
52	9	1	
50			
48			
46	725	3	

MULTIPLY STEM.LEAF BY 10**-02

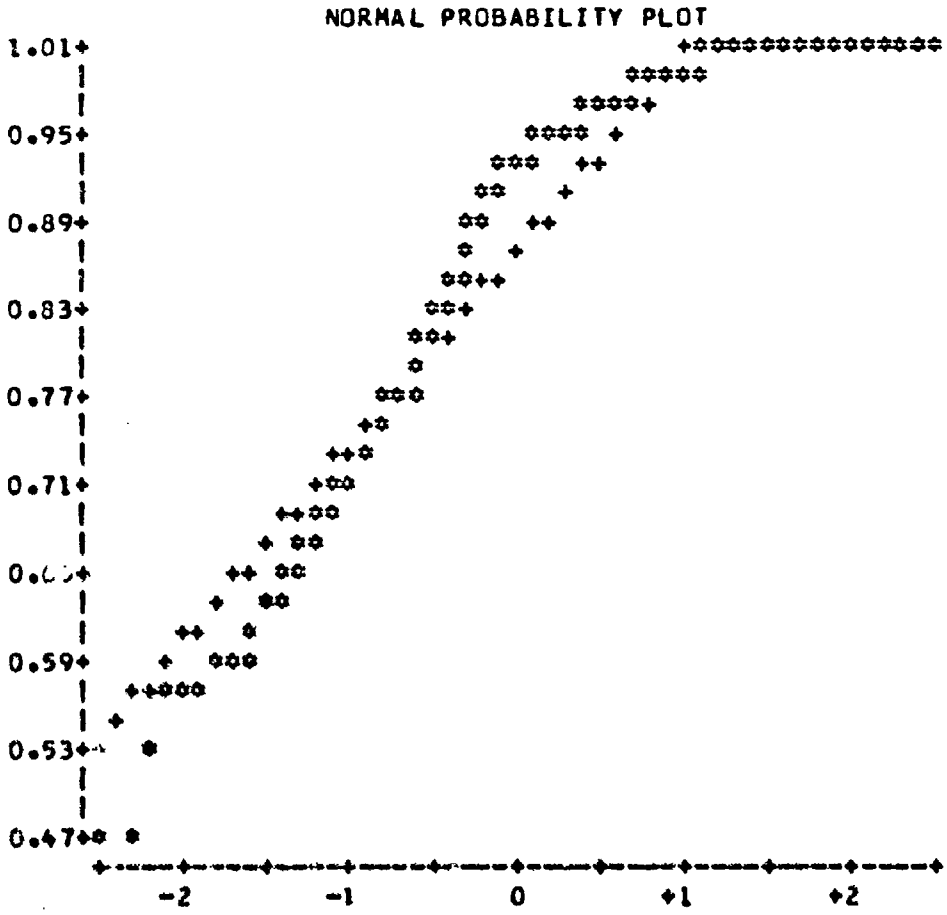
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=CRPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=HIGH

UNIVARIATE

VARIABLE=CRMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	3077.42	SUM	757046
STD DEV	1883.63	VARIANCE	3548052
SKEWNESS	1.22779	KURTOSIS	1.37474
USS	3199023256	CSS	869272662
CV	61.2079	STD MEAN	120.096
T:MEAN=0	25.6248	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
D:NORMAL	0.122381	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	9419	99%	9174.56
75% Q3	3909.5	95%	7033.45
50% MED	2706	90%	5871.1
25% Q1	1735	10%	1079.2
0% MIN	326	5%	833.45
		1%	544.5
RANGE	9093		
Q3-Q1	2174.5		
MODE	1401		

EXTREMES

LOWEST	ID	HIGHEST	ID
326(	138)	8604(	60)
521(	138)	8790(	56)
571(	122)	8988(	93)
607(	122)	9340(	58)
613(	50)	9419(	56)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=HIGH

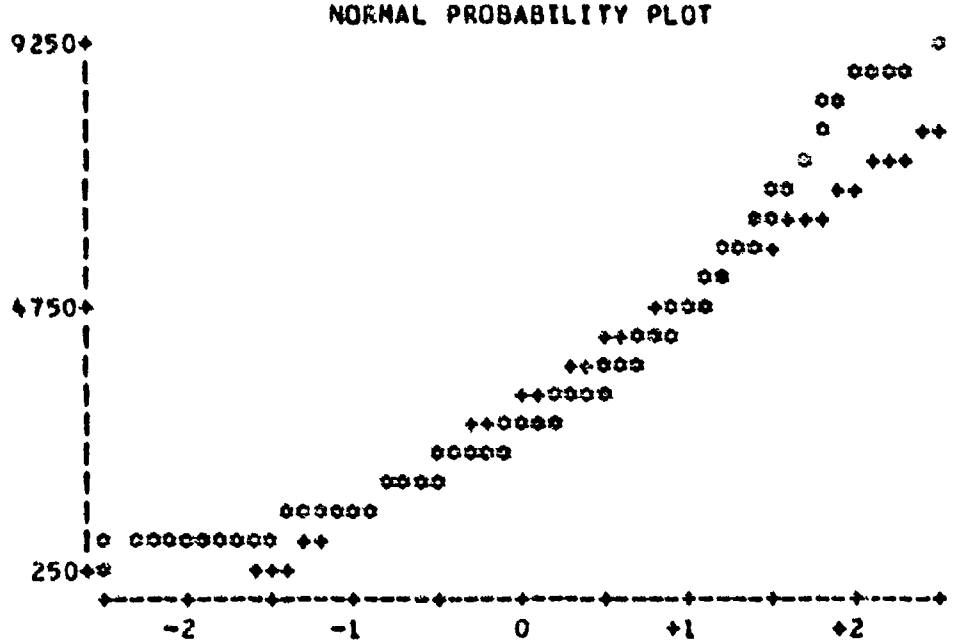
UNIVARIATE

VARIABLE=CRMNO

STEM	LEAF	#	BOXPLOT
9	034	3	0
8	568	3	0
8	014	3	0
7	8	1	0
7	12	2	|
6	55899	5	|
6	01123	5	|
5	568999	6	|
5	00113344	8	|
4	55557778889	11	|
4	0001122334444	13	|
3	55555555666777778899	19	+------+
3	00000000001112223333344444	26	| + |
2	55556666777777778888889999999	29	o------o
2	00000001111122222233333333333444444444	37	| |
1	55555555556667777888888999999999	30	+------+
1	00000011111122222223333333344444	30	|
0	56666777888899	14	|
0	3	1	|

MULTIPLY STEM.LEAF BY 10**+03

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=HIGH

UNIVARIATE

VARIABLE=CRPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.727693	SUM	179.013
STD DEV	0.129293	VARIANCE	0.0167166
SKEWNESS	0.085123	KURTOSIS	-0.593061
USS	134.362	CSS	4.09557
CV	17.7675	STD MEAN	0.0082434
T:MEAN=0	88.2758	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.0494546	PROB>D	0.147

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.80718	95%	0.949079
50% MED	0.725917	90%	0.921803
25% Q1	0.637431	10%	0.558019
0% MIN	0.452381	5%	0.5
		1%	0.460893
RANGE	0.547619		
Q3-Q1	0.169749		
MODE	0.75		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.452381(	36)	0.980769(	61)
0.459677(	6)	0.981132(	102)
0.462264(	124)	1(	30)
0.462963(	59)	1(	56)
0.481132(	10)	1(	86)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR CONTINUOUS RECALL

LEVEL=HIGH

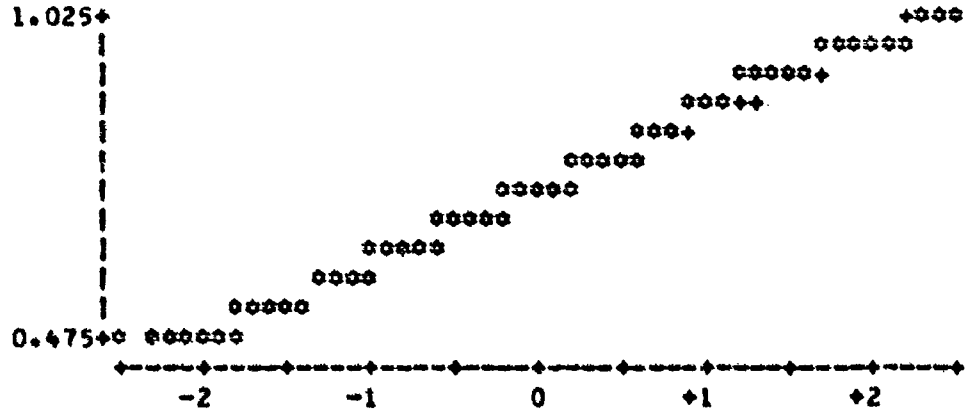
UNIVARIATE

VARIABLE=CRPCO

STEM	LEAF	#	BOXPLOT
10	000	3	
9	5556666788	10	
9	011122222334444444	18	
8	5566677788889999999	19	
8	000000011111122222444	20	
7	55555555555555566666777777888999999999	38	
7	00000001111111222222333333344444444	36	
6	55555555556666666777778888899999999999	38	
6	000000111111233333333344	26	
5	555566777778889999	18	
5	0000001112334	13	
4	5666899	7	

MULTIPLY STEM.LEAF BY 10**-01

NORMAL PROBABILITY PLOT



Appendix A-2

Univariate Summaries - Grammatical Reasoning

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=LOW

UNIVARIATE

VARIABLE=GRMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	3252.01	SUM	799994
STD DEV	1136.47	VARIANCE	1291560
SKEWNESS	1.17146	KURTOSIS	1.27306
USS	2918019264	CSS	316432272
CV	34.9467	STD MEAN	72.4586
T:MEAN=0	44.8809	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.114231	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	7821	99%	6587.91
75% Q3	3740.5	95%	5715
50% MED	3001	90%	5015.6
25% Q1	2399.75	10%	2066.2
0% MIN	1491	5%	1887.7
		1%	1646.93
RANGE	6330		
Q3-Q1	1340.75		
MODE	1885		

EXTREMES

LOWEST	ID	HIGHEST	ID
1491(	145)	6450(	112)
1638(	55)	6560(	65)
1657(	53)	6563(	147)
1687(	128)	6610(	23)
1742(	20)	7821(	66)

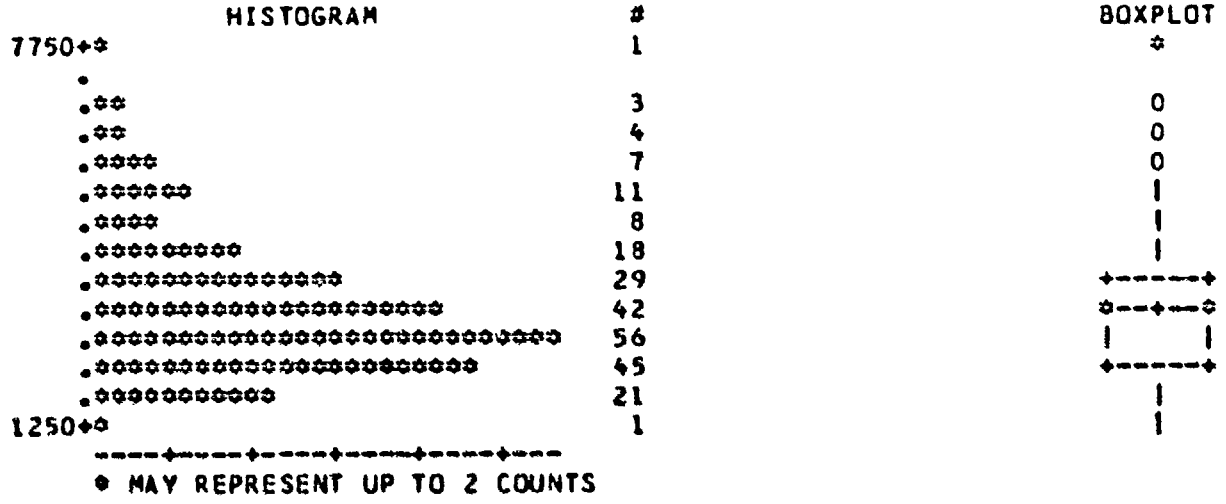
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

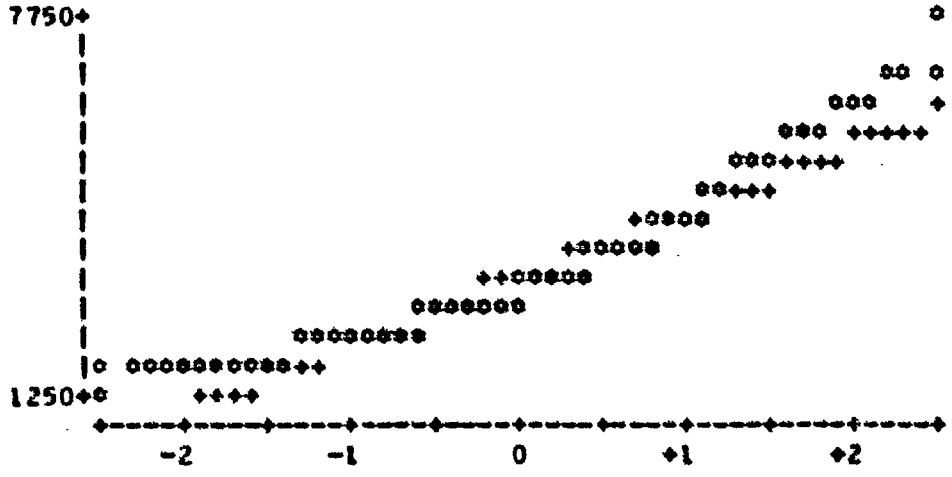
LEVEL=LOW

UNIVARIATE

VARIABLE=GRMNO



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=LOW

UNIVARIATE

VARIABLE=GRPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.93034	SUM	228.864
STD DEV	0.0878244	VARIANCE	0.00771312
SKEWNESS	-2.72691	KURTOSIS	8.17333
USS	214.811	CSS	1.88972
CV	9.44003	STD MEAN	0.00559948
T:MEAN=0	166.148	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ~= 0	246		
D:NORMAL	0.222693	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.978834	95%	1
50% MED	0.958333	90%	1
25% Q1	0.920948	10%	0.842016
0% MIN	0.47619	5%	0.71129
		1%	0.53946
RANGE	0.52381		
Q3-Q1	0.057886		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.47619(	22)	1(	95)
0.511111(	19)	1(	104)
0.571429(	23)	1(	118)
0.59375(	19)	1(	123)
0.612903(	150)	1(	128)

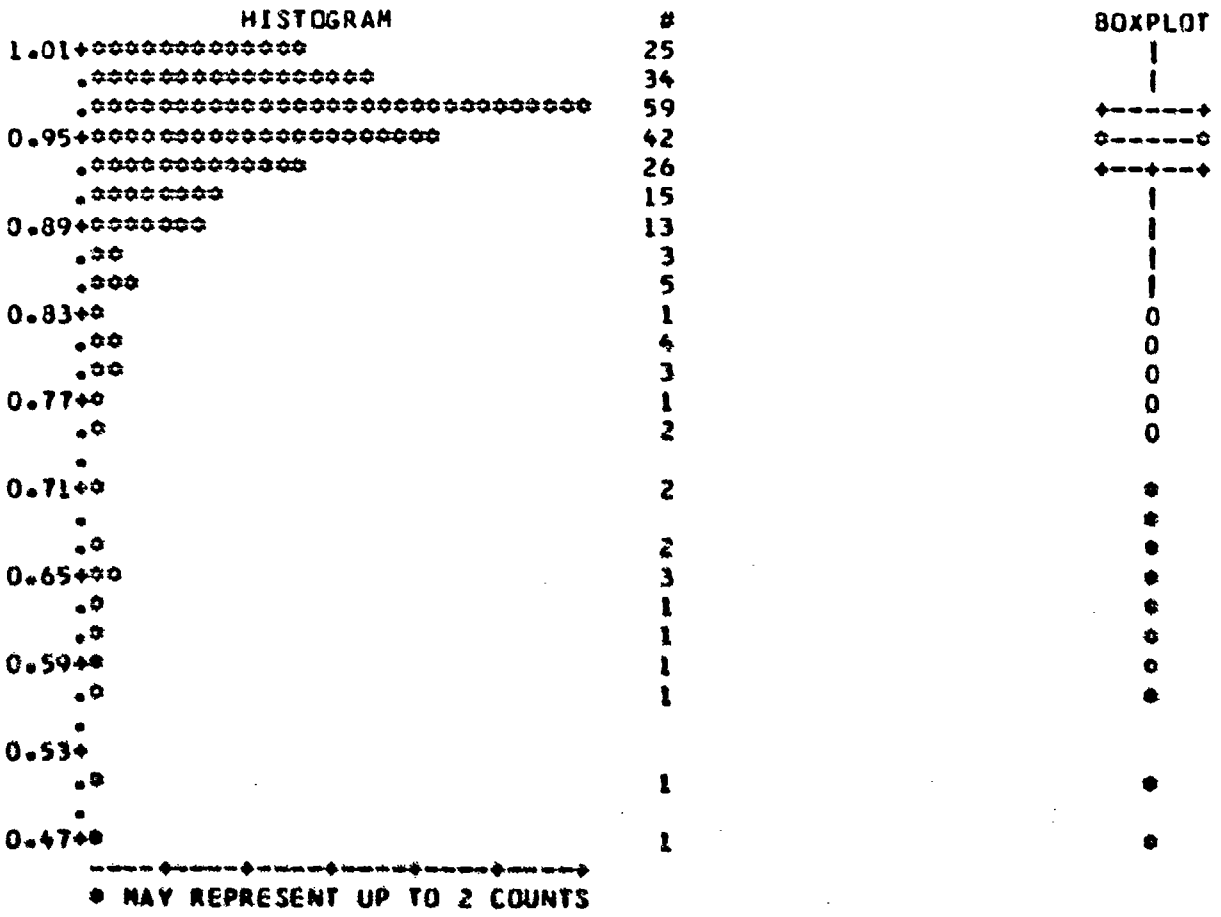
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=LOW

UNIVARIATE

VARIABLE=GRPCO



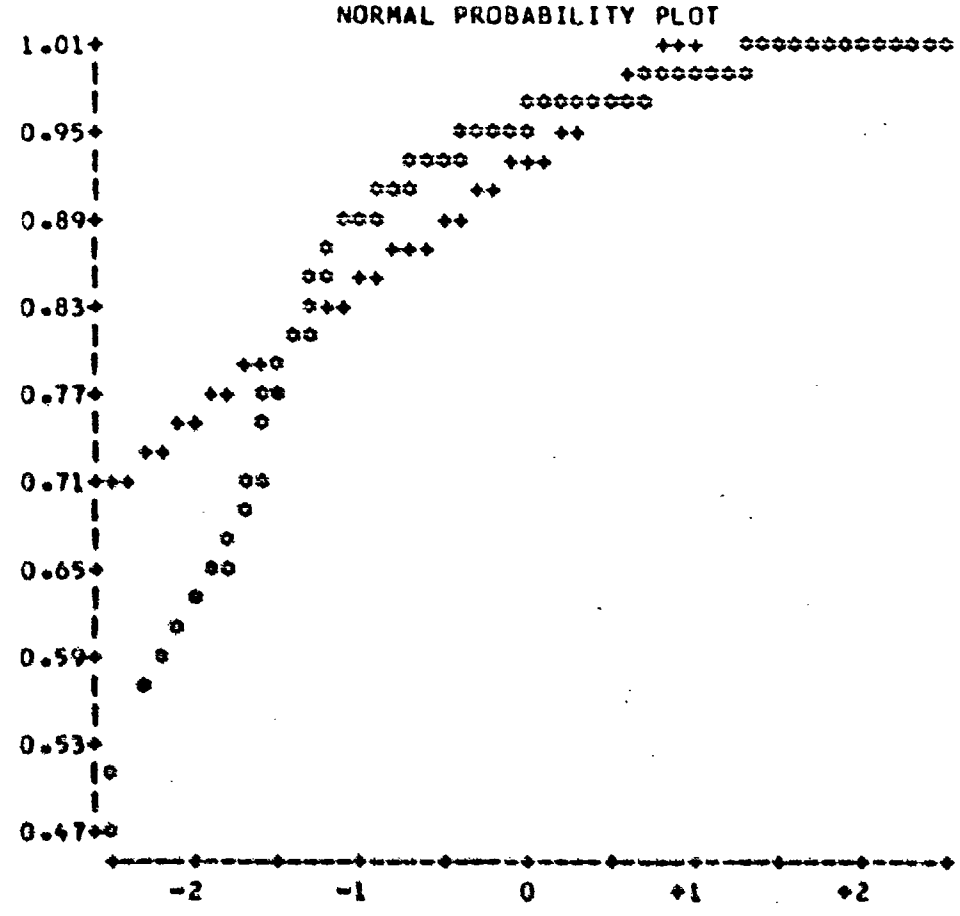
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=LOW

UNIVARIATE

VARIABLE=GRPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=GRMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	5628.15	SUM	1384525
STD DEV	1514.08	VARIANCE	2292448
SKEWNESS	0.542664	KURTOSIS	1.16568
USS	8353964587	CSS	561649645
CV	26.902	STD MEAN	96.5344
T:MEAN=0	58.302	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.0647486	PROB>D	0.013

QUANTILES(DEF=4)

100% MAX	11685	99%	10018.3
75% Q3	6476.5	95%	8400
50% MED	5425	90%	7676
25% Q1	4691.25	10%	3922.9
0% MIN	1237	5%	3511.65
		1%	1690.27
RANGE	10448		
Q3-Q1	1785.25		
MODE	3928		

EXTREMES

LOWEST	ID	HIGHEST	ID
1237(	145)	9318(	150)
1389(	145)	9421(	150)
2030(	129)	9642(	147)
2509(	9)	10352(	10)
2663(	9)	11685(	65)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=GRMNO

STEM	LEAF	#	BOXPLOT
11	7	1	0
11			
10			
10	4	1	0
9	6	1	0
9	334	3	0
8	55699	5	|
8	1122334	7	|
7	5577778899	10	|
7	1112223333344	13	|
6	55555556666667777788999	23	|
6	00000011112222333334444444	27	+---+
5	55555666666667777788888889999	30	| * |
5	00000111111111112222222333333333334444	39	*---*
4	55566666666666677777777777788888999999999	41	+---+
4	00111111223333444	18	|
3	5666677778889999	16	|
3	334444	6	|
2	57	2	|
2	0	1	|
1			
1	24	2	0

MULTIPLY STEM.LEAF BY 10**+03

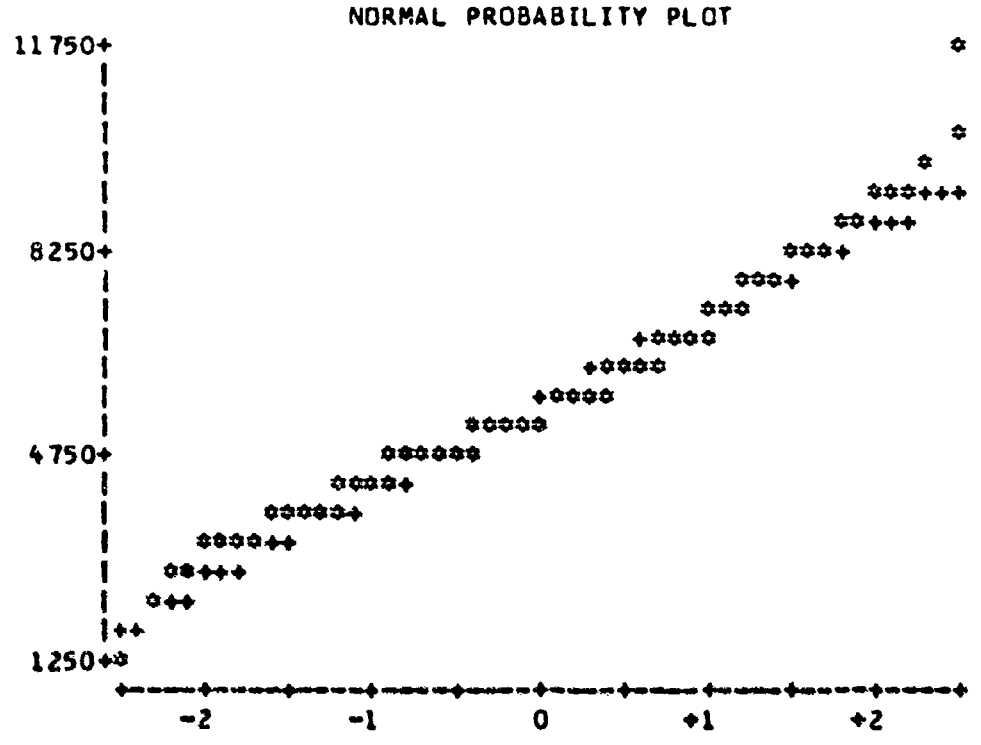
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=GRMNO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=GRPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.911821	SUM	224.308
STD DEV	0.113742	VARIANCE	0.0129373
SKEWNESS	-2.23683	KURTOSIS	5.39416
USS	207.698	CSS	3.16965
CV	12.4742	STD MEAN	0.00725195
T:MEAN=0	125.735	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.219095	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.977273	95%	1
50% MED	0.957428	90%	1
25% Q1	0.888889	10%	0.767093
0% MIN	0.407407	5%	0.65
		1%	0.430097
RANGE	0.592593		
Q3-Q1	0.0883839		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.407407(	22)	1(	142)
0.428571(	147)	1(	143)
0.431818(	124)	1(	144)
0.5(	108)	1(	144)
0.5(	19)	1(	148)

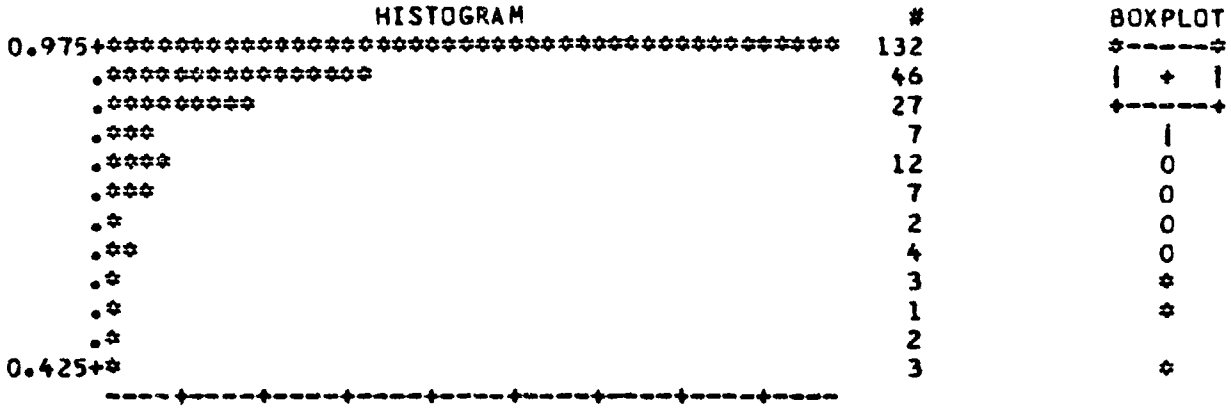
USAF/SCEEE LARGE-SCALE CTS STUDY

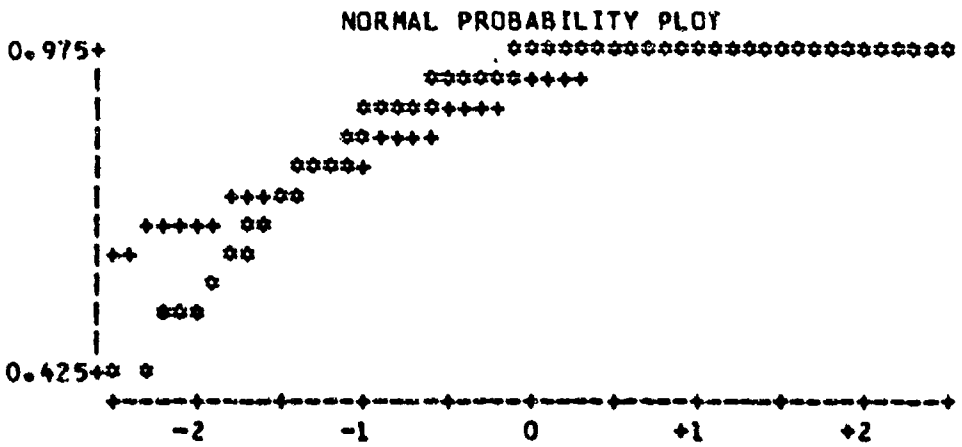
UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=GRPCO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=HIGH

UNIVARIATE

VARIABLE=GRMND

MOMENTS

N	246	SUM WGTS	246
MEAN	7472.33	SUM	1838193
STD DEV	1816.01	VARIANCE	3297879
SKEWNESS	-0.0250838	KURTOSIS	0.727618
USS	1.454E+10	CSS	807980392
CV	24.3031	STD MEAN	115.784
T:MEAN=0	64.5366	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.0504264	PROB>D	0.129

QUANTILES(DEF=4)

100% MAX	12632	99%	11922.7
75% Q3	8632	95%	10719.6
50% MED	7438.5	90%	9916.3
25% Q1	6236.25	10%	5348.7
0% MIN	1440	5%	5056.9
		1%	1612.86
RANGE	11192		
Q3-Q1	2395.75		
MODE	5951		

EXTREMES

LOWEST	ID	HIGHEST	ID
1440(	145)	11637(	65)
1454(	145)	11651(	150)
1792(	129)	11751(	80)
3115(	9)	12075(	65)
3432(	9)	12632(	10)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=HIGH

UNIVARIATE

VARIABLE=GRMND

STEM	LEAF	#	BOXPLOT
12	6	1	0
12	1	1	|
11	678	3	|
11	12	2	|
10	55667778889	11	|
10	22223	5	|
9	57778999	8	|
9	000000011122224	15	|
8	555566666777788899999999	25	+------+
8	000000111111222222233334 4	26	| |
7	555555666666778888888999	25	| |
7	001111122222233333344444	24	*--+--*
6	55555667778888888999	21	| |
6	000000001222222233333344444444 4	31	+------+
5	5667777778888888999999	21	|
5	001112222333333344	18	|
4	568	3	|
4			|
3	5	1	|
3	14	2	|
2			
2			
1	58	2	0
1	4	1	0

----+----+----+----+----+----+-

MULTIPLY STEM.LEAF BY 10**+03

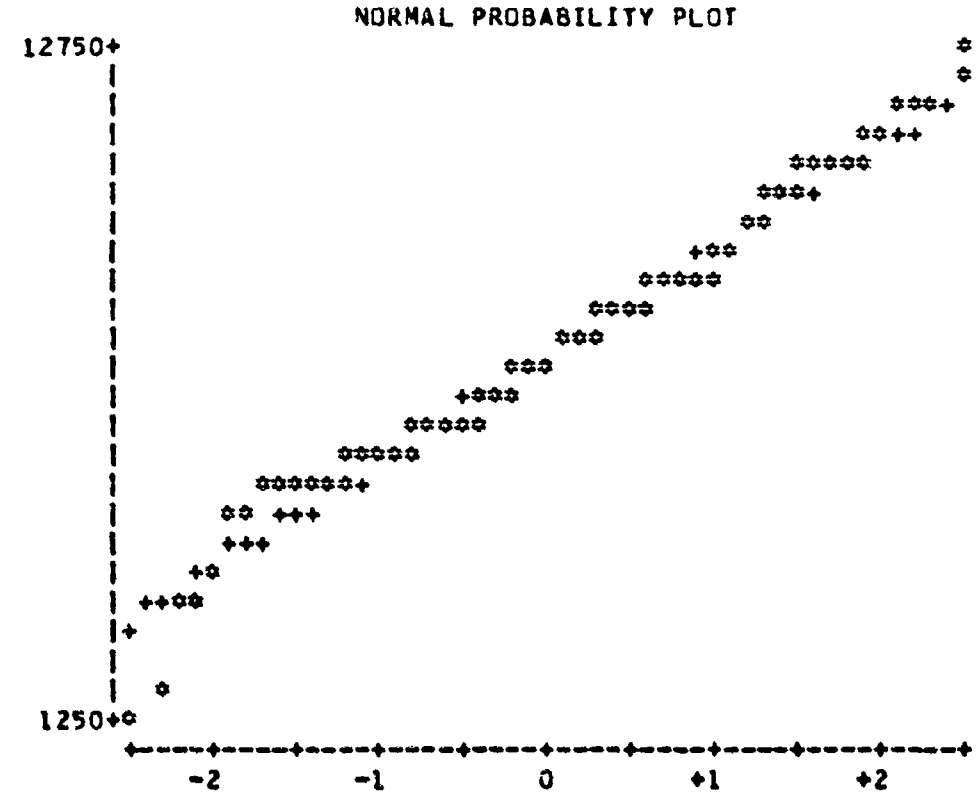
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=HIGH

UNIVARIATE

VARIABLE=GRMNO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

LEVEL=HIGH

UNIVARIATE

VARIABLE=GRPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.852342	SUM	209.676
STD DEV	0.147479	VARIANCE	0.0217502
SKEWNESS	-1.6214	KURTOSIS	2.95364
USS	184.045	CSS	5.3288
CV	17.3028	STD MEAN	0.00940295
T:MEAN=0	90.6463	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.158362	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.95504	95%	1
50% MED	0.894737	90%	1
25% Q1	0.807143	10%	0.649118
0% MIN	0.2	5%	0.536136
		1%	0.296044
RANGE	0.8		
Q3-Q1	0.147897		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.2(	143)	1(	129)
0.285714(	2)	1(	131)
0.307692(	19)	1(	132)
0.333333(	65)	1(	141)
0.4(	70)	1(	144)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR GRAMMATICAL REASONING

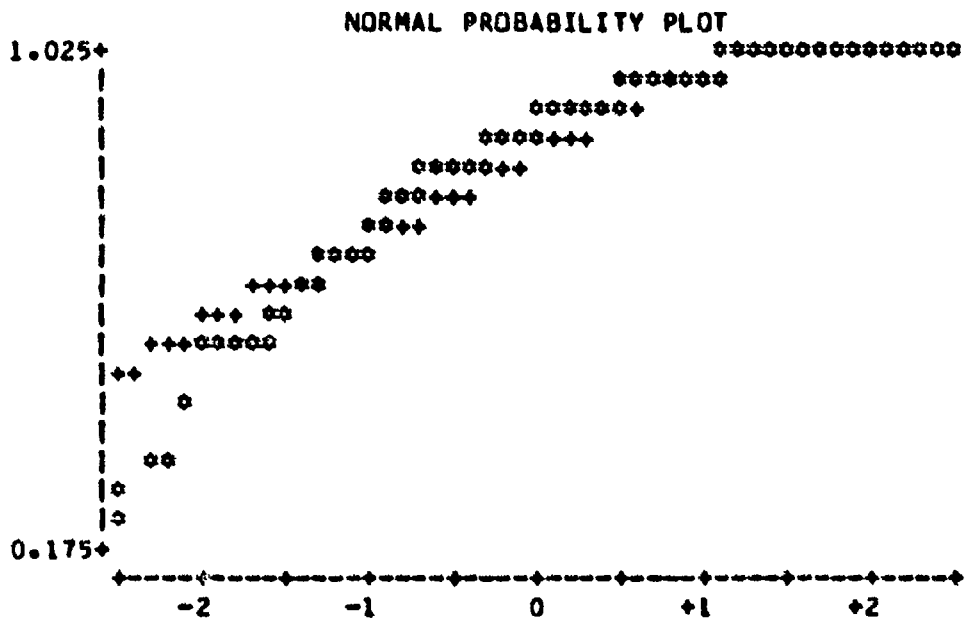
LEVEL=HIGH

UNIVARIATE

VARIABLE=GRPCO

STEM	LEAF	#	BOXPLOT
10	00000000000000000000000000000000	34	
9	55555555555555555566666666666666666667777777889	46	+------+
9	00000000011111112222222333333334444444444	42	| |
8	55555566777777788888899999999999	34	*--+--*
8	00011112222222233333333444444444	32	+------+
7	555667778899	12	|
7	011122233	9	|
6	55557777889999	14	|
6	01124	5	|
5	66999	5	0
5	00003334	8	0
4			
4	0	1	0
3			
3	13	2	*
2	9	1	*
2	0	1	*
1			

MULTIPLY STEM.LEAF BY 10**-01



Appendix A-3

Univariate Summaries - Interval Production

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPMN

MOMENTS

N	240	SUM WGTS	240
MEAN	506.342	SUM	121522
STD DEV	129.258	VARIANCE	16707.5
SKEWNESS	2.53645	KURTOSIS	10.3153
USS	65524756	CSS	3993104
CV	25.5278	STD MEAN	8.34355
T:MEAN=0	60.6866	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.163904	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1239	99%	1165.85
75% Q3	547.5	95%	734.75
50% MED	493	90%	609.9
25% Q1	437	10%	393.4
0% MIN	265	5%	356.4
		1%	282.56
RANGE	974		
Q3-Q1	110.5		
MODE	447		

EXTREMES

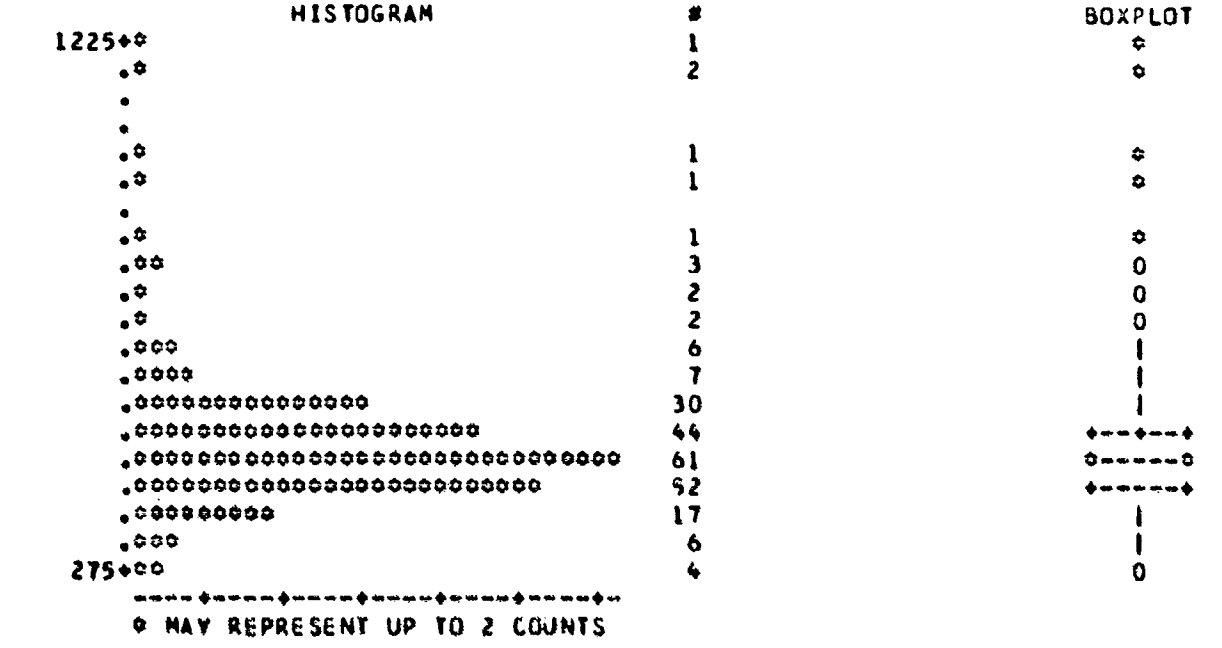
LOWEST	ID	HIGHEST	ID
265(	37)	970(	112)
276(	108)	1008(	17)
292(	37)	1157(	124)
298(	118)	1172(	112)
309(	78)	1239(	124)

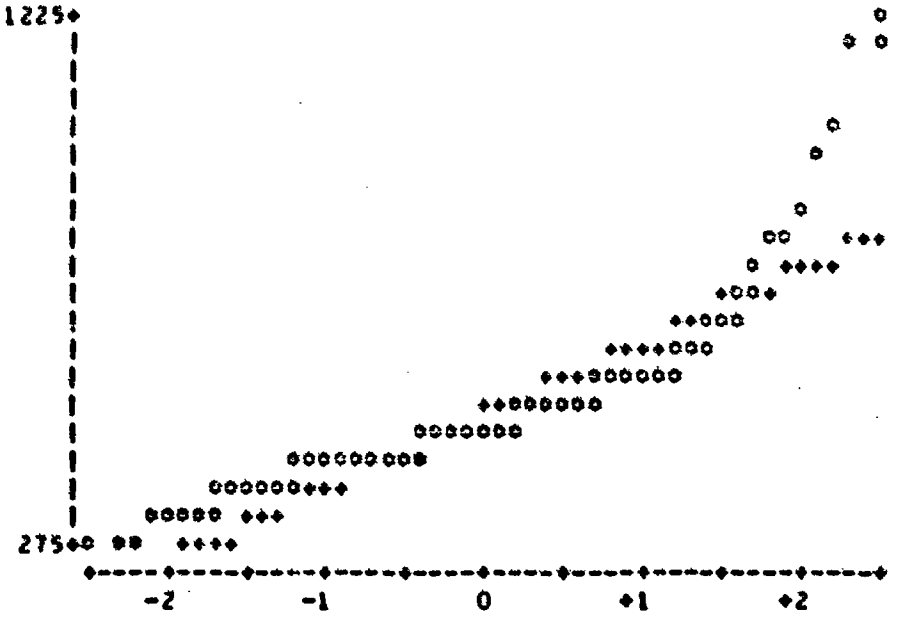
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPMN





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPSO

MOMENTS

N	240	SUM WGTS	240
MEAN	51.4962	SUM	12359.1
STD DEV	40.2567	VARIANCE	1620.6
SKEWNESS	3.32076	KURTOSIS	13.8124
USS	1023770	CSS	387323
CV	78.1739	STD MEAN	2.59856
T:MEAN=0	19.8173	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.199097	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	285.7	99%	273.013
75% Q3	57.85	95%	115.22
50% MED	39.95	90%	88.82
25% Q1	29.15	10%	22.84
0% MIN	15.7	5%	20
		1%	17.423
RANGE	270		
Q3-Q1	28.7		
MODE	28.5		

EXTREMES

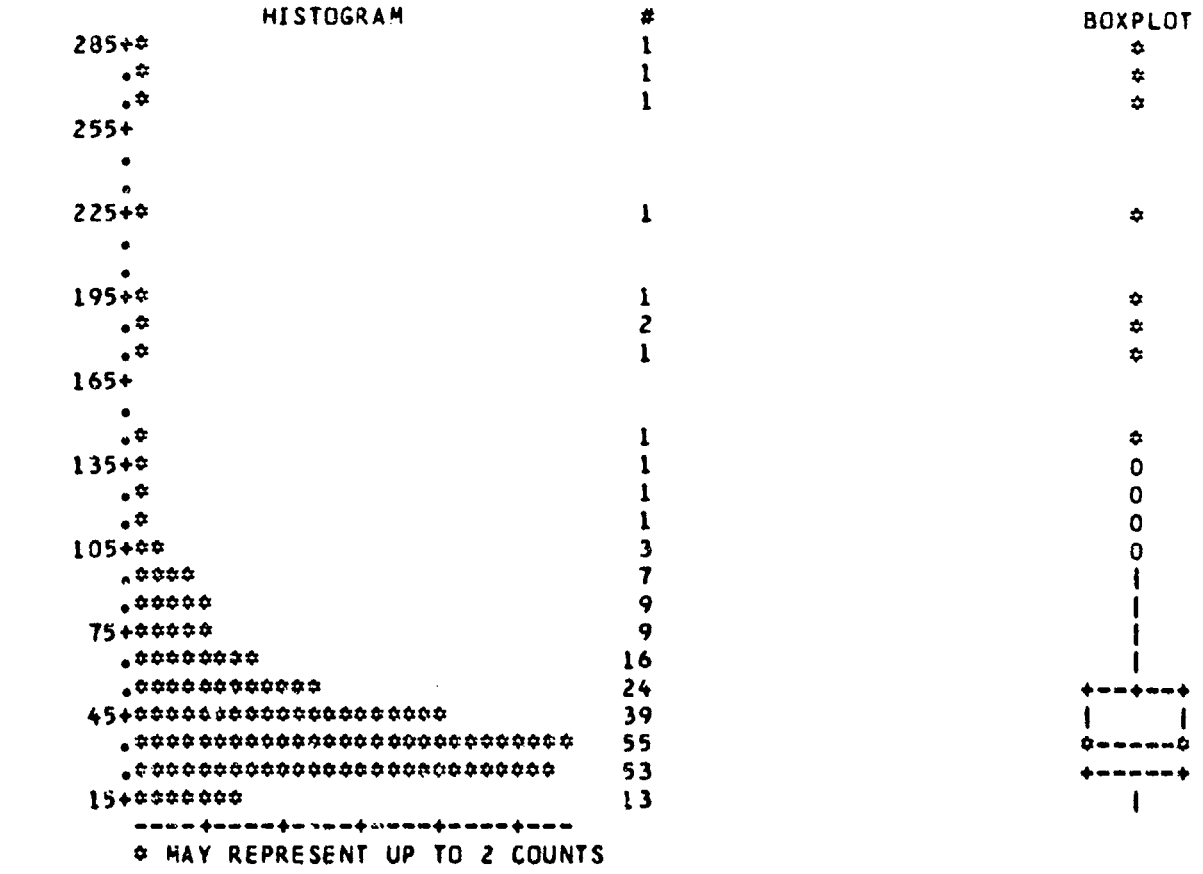
LOWEST	ID	HIGHEST	ID
15.7(	9)	194.4(	36)
17.3(	141)	229.2(	112)
17.6(	34)	266.7(	18)
18.1(	9)	277.4(	124)
18.2(	34)	285.7(	124)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPSD



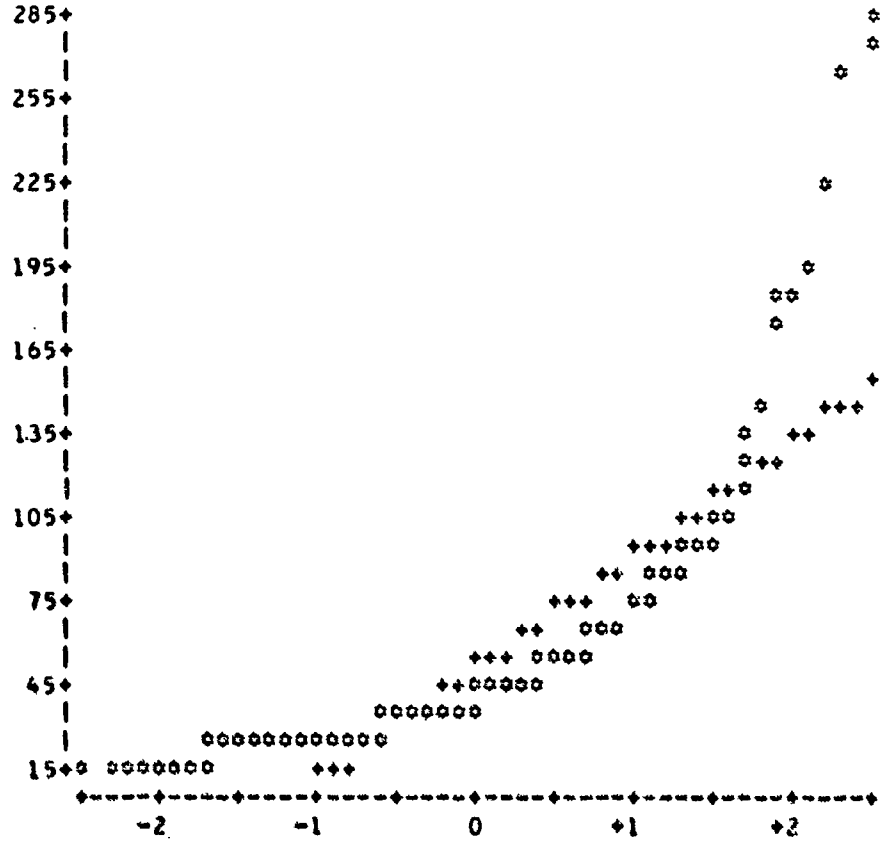
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPSD

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPVS1

MOMENTS

N	240	SUM WGTS	240
MEAN	28.6375	SUM	6872.99
STD DEV	13.5025	VARIANCE	182.317
SKEWNESS	1.97117	KURTOSIS	5.82816
USS	240399	CSS	43573.9
CV	47.1498	STD MEAN	0.871583
T:MEAN=0	32.8569	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.121362	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	98.04	99%	88.0704
75% Q3	34.8925	95%	55.7385
50% MED	25.46	90%	42.383
25% Q1	19.6075	10%	15.812
0% MIN	9.11	5%	13.392
		1%	11.5646
RANGE	88.93		
Q3-Q1	15.285		
MODE	24.55		

EXTREMES

LOWEST	ID	HIGHEST	ID
9.11(	74)	68.56(	146)
11.54(	22)	78.28(	108)
11.6(	23)	83.61(	58)
11.76(	34)	91.17(	106)
11.77(	112)	98.04(	5)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

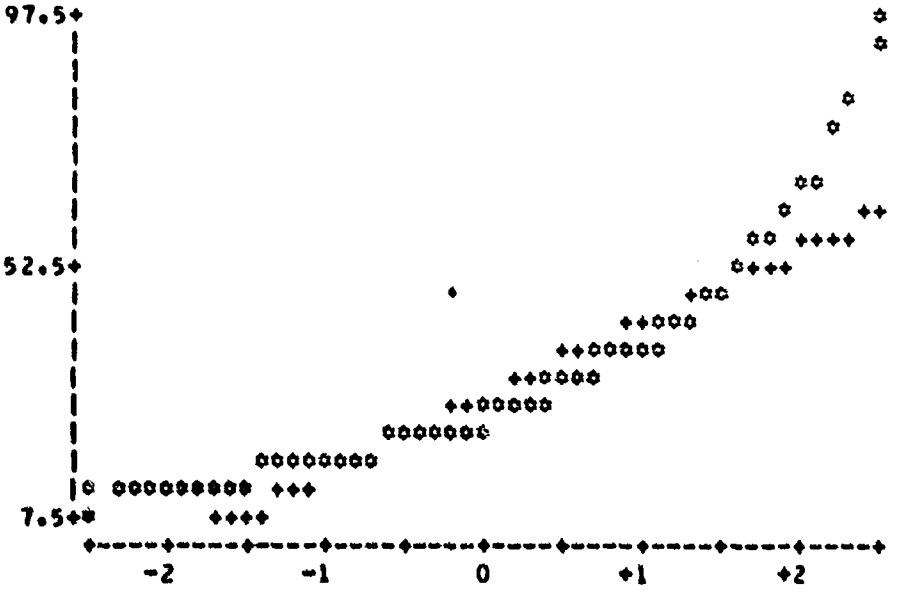
UNIVARIATE

VARIABLE=IPVS1

STEM	LEAF	#	BOXPLOT
9	8	1	*
9	1	1	*
8			
8	4	1	*
7	8	1	0
7			
6	589	3	0
6	3	1	0
5	6689	4	0
5	0034	4	|
4	56679	5	|
4	0001111112233	13	|
3	55566666677788888888999999	26	|
3	00000111111111122222333344444	28	+------+
2	55555555555555556666666666777777777788888999999	47	*--+--*
2	00000000001111111111111112222222333333334444444	46	| |
1	55666666666667777777788888888899999999999999	42	+------+
1	2222223333344444	16	|
0	9	1	|

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPVS2

MOMENTS

N	240	SUM WGTS	240
MEAN	0.0766936	SUM	18.4065
STD DEV	0.0314029	VARIANCE	.000986141
SKEWNESS	2.13814	KURTOSIS	7.7177
USS	1.64735	CSS	0.235688
CV	40.9459	STD MEAN	0.00202705
T:MEAN=0	37.8351	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.133414	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	0.266579	99%	0.21055
75% Q3	0.0893615	95%	0.146028
50% MED	0.0693767	90%	0.115216
25% Q1	0.0549036	10%	0.0472088
0% MIN	0.0330337	5%	0.0432757
		1%	0.0364113
RANGE	0.233545		
Q3-Q1	0.034458		
MODE	0.0330337		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.0330337(	34)	0.157514(	112)
0.0361894(	141)	0.163666(	31)
0.0367308(	34)	0.17922(	36)
0.0380124(	74)	0.232322(	5)
0.0388056(	111)	0.266579(	106)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPVS2

STEM	LEAF	#	BOXPLOT
26	7	1	*
25			
24			
23	2	1	*
22			
21			
20			
19			
18			
17	9	1	0
16	4	1	0
15	02468	5	0
14	688	3	0
13	027	3	|
12	001144	6	|
11	013567	6	|
10	001111222344457	15	|
9	002223455666666889	18	|
8	000000111111123333455558899	27	+------+
7	000001122223344455555556677788899	33	| + |
6	001111222223333344444445555556666777788899	43	*------*
5	000011112222333333444444555555556677888889999	44	+------+
4	001233344455556667788888899 9	28	|
3	36789	5	|

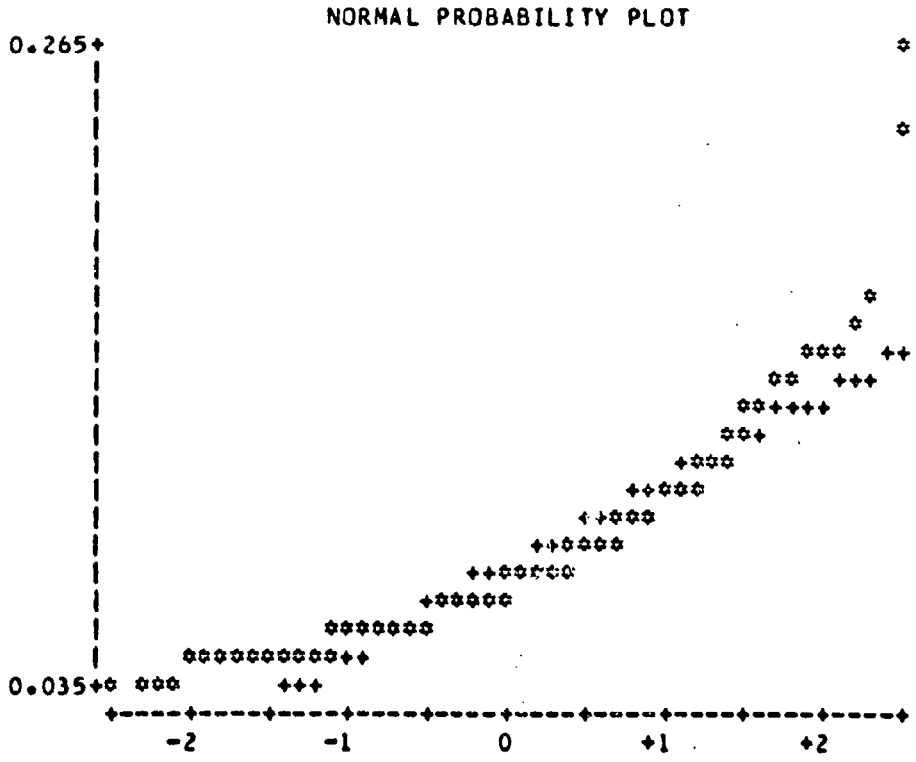
MULTIPLY STEM.LEAF BY 10**-02

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR INTERVAL PRODUCTION

UNIVARIATE

VARIABLE=IPVS2



Appendix A-4

Univariate Summaries - Linguistic Processing

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=LPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	523.443	SUM	128767
STD DEV	108.912	VARIANCE	11861.9
SKEWNESS	2.04542	KURTOSIS	4.71995
USS	70308363	CSS	2906167
CV	20.8069	STD MEAN	6.944
T:MEAN=0	75.3806	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.202856	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1060	99%	946.59
75% Q3	550.25	95%	775.55
50% MED	485	90%	683.4
25% Q1	456.75	10%	430
0% MIN	403	5%	421.35
		1%	410.41
RANGE	657		
Q3-Q1	93.5		
MODE	484		

EXTREMES

LOWEST	ID	HIGHEST	ID
403(	38)	874(	44)
409(	123)	885(	23)
412(	21)	892(	60)
413(	53)	995(	17)
414(	53)	1060(	144)

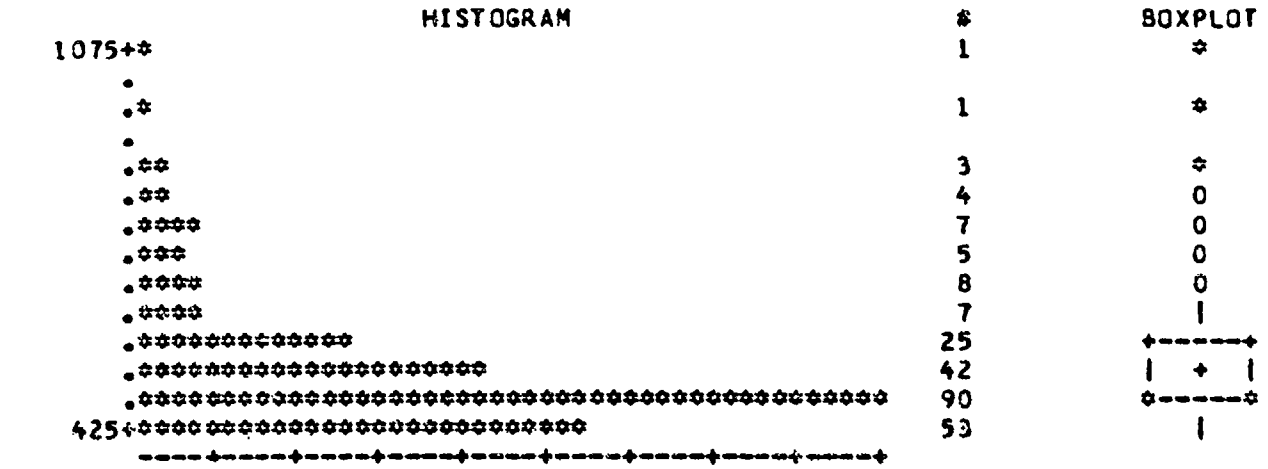
USAF/SCEEE LARGE-SCALE CTS STUDY

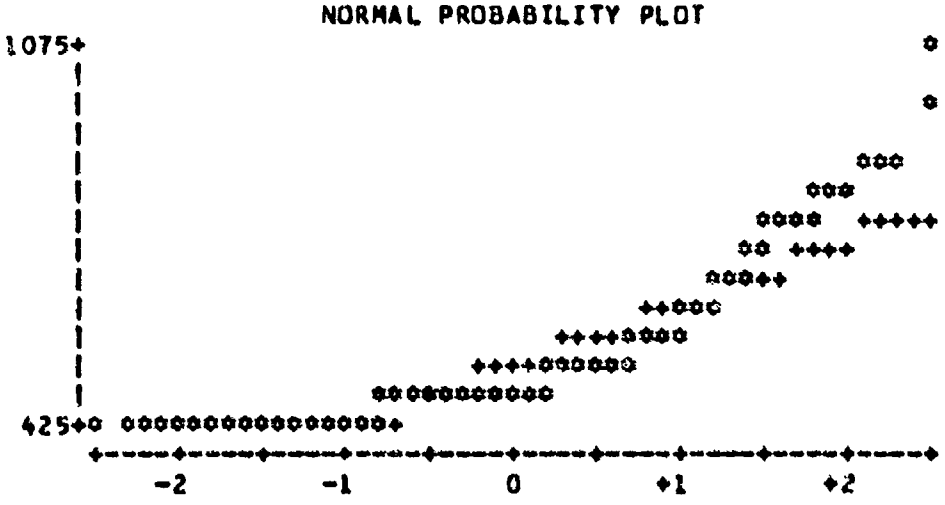
UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=LPMNO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=LPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.96694	SUM	237.867
STD DEV	0.0381421	VARIANCE	0.00145482
SKEWNESS	-3.06536	KURTOSIS	11.6924
USS	230.36	CSS	0.35643
CV	3.94462	STD MEAN	0.00243185
T:MEAN=0	397.615	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
D:NORMAL	0.193034	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.989352	95%	1
50% MED	0.975976	90%	0.996305
25% Q1	0.958647	10%	0.931481
0% MIN	0.757202	5%	0.905685
		1%	0.781509
RANGE	0.242798		
Q3-Q1	0.0307054		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.757202(	76)	1(	91)
0.777344(	122)	1(	94)
0.786207(	23)	1(	104)
0.787671(	144)	1(	127)
0.8(	133)	1(	146)

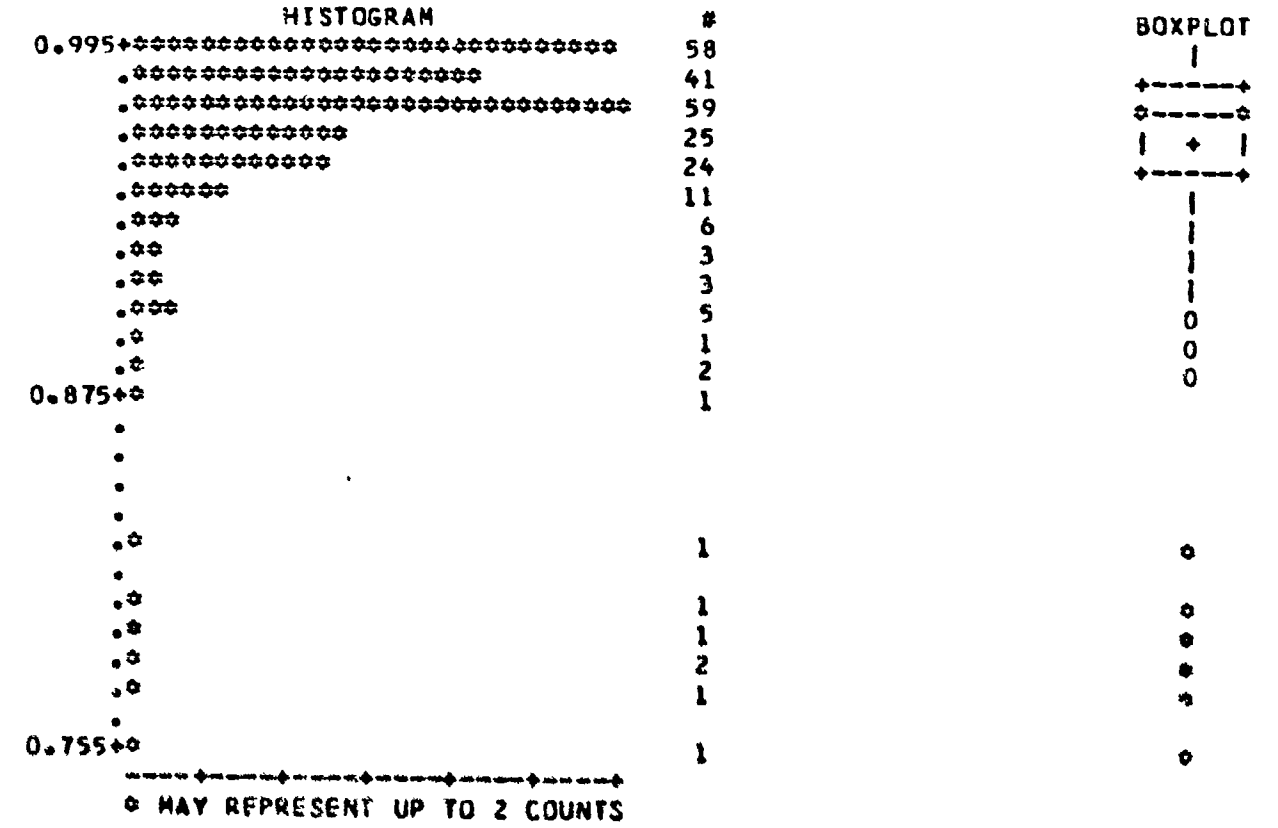
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=LPPCO



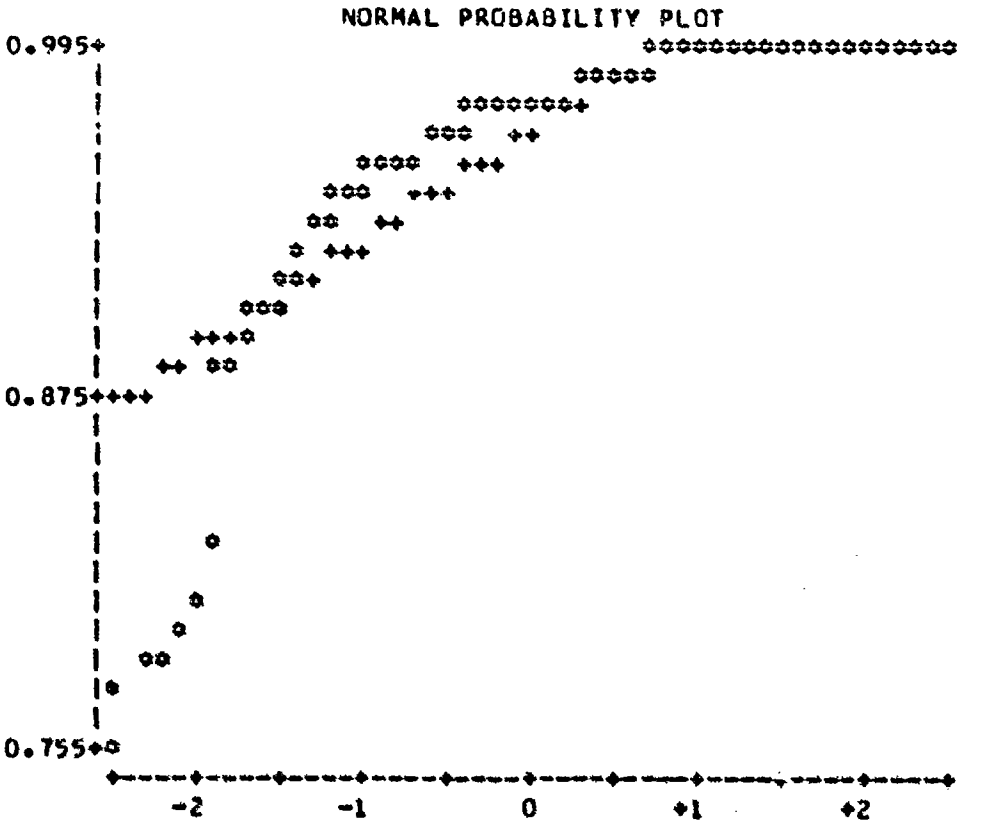
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=LPPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=LPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	792.008	SUM	194834
STD DEV	249.043	VARIANCE	62022.3
SKEWNESS	1.882	KURTOSIS	4.0833
USS	169505564	CSS	15195452
CV	31.4445	STD MEAN	15.8784
T:MEAN=0	49.8797	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.158343	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1812	99%	1764.54
75% Q3	889	95%	1292.35
50% MED	714	90%	1089.6
25% Q1	632.75	10%	566.1
0% MIN	489	5%	536.35
		1%	501.11
RANGE	1323		
Q3-Q1	256.25		
MODE	643		

EXTREMES

LOWEST	ID	HIGHEST	ID
489(	145)	1614(	112)
495(	114)	1730(	112)
508(	114)	1755(	65)
513(	123)	1773(	80)
518(	69)	1812(	17)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=LPMNO

STEM	LEAF	#	BOXPLOT
18	1	1	*
17	57	2	*
17	3	1	*
16			
16	111	3	0
15	8	1	0
15	3	1	0
14			
14			
13	8	1	0
13	03	2	0
12	778	3	0
12	04	2	|
11	5999	4	|
11	01	2	|
10	556899	6	|
10	11223333	8	|
9	66678899	8	|
9	000111122333444	15	|
8	556667799	9	+---+
8	001111111111222344	18	| |
7	5556777777888889999	20	| + |
7	000000011111111111222222333333444	33	*---*
6	55555555566666777788888888889999	33	| |
6	000011111222233333334444444444	30	+---+
5	555566666777888888999999999	28	|
5	1122222334444	13	|
4	99	2	|

MULTIPLY STEM.LEAF BY 10**+02

USAF/SCEEE LARGE-SCALE CTS STUDY

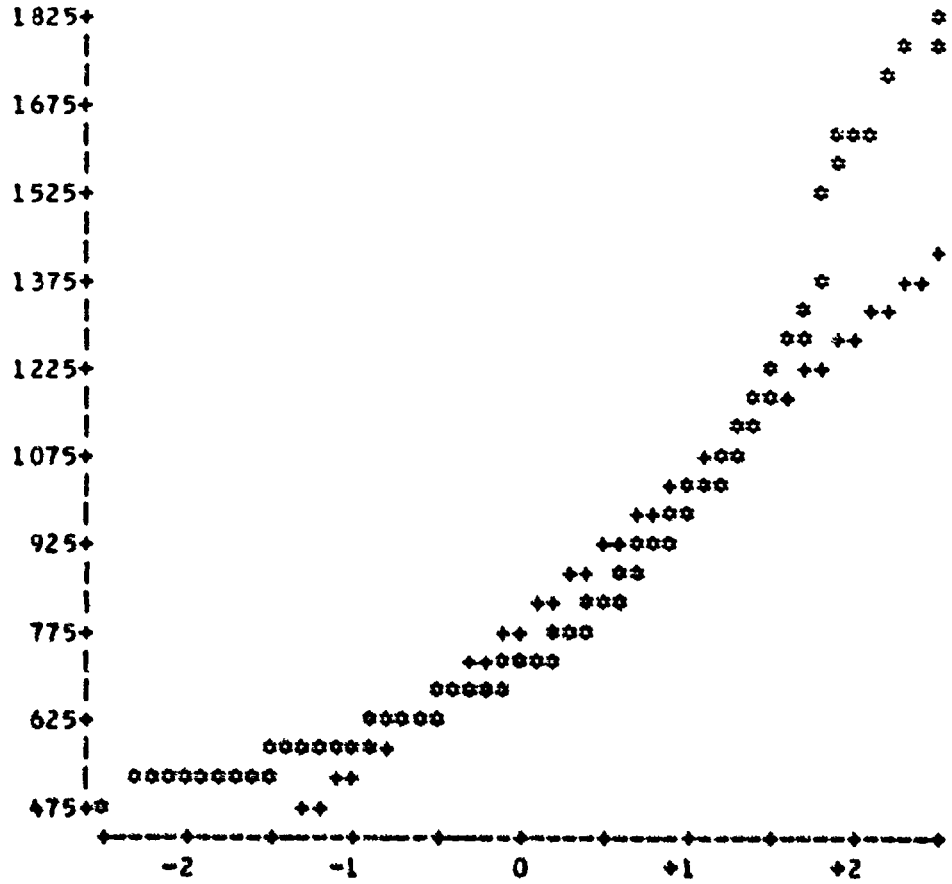
UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=LPMNO

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=LPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.962504	SUM	236.776
STD DEV	0.0326676	VARIANCE	0.00106717
SKEWNESS	-3.37945	KURTOSIS	22.6336
USS	228.159	CSS	0.261458
CV	3.39403	STD MEAN	0.00208281
T:MEAN=0	462.117	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.141963	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.982275	95%	0.99838
50% MED	0.968361	90%	0.992181
25% Q1	0.952333	10%	0.930606
0% MIN	0.680272	5%	0.894432
		1%	0.864654
RANGE	0.319728		
Q3-Q1	0.0299411		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.680272(	22)	1(	80)
0.861314(	55)	1(	126)
0.868421(	65)	1(	142)
0.875502(	53)	1(	144)
0.881679(	53)	1(	146)

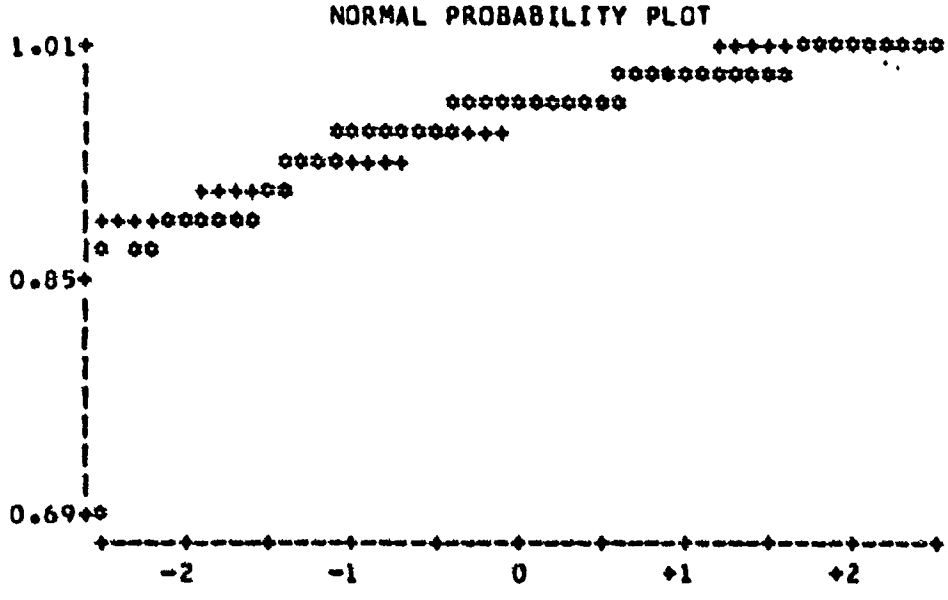
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=LPPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=LPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	1578.01	SUM	388190
STD DEV	449.808	VARIANCE	202327
SKEWNESS	1.77368	KURTOSIS	4.74937
USS	662137146	CSS	49570170
CV	28.5048	STD MEAN	28.6787
T:MEAN=0	55.0237	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.158815	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	4040	99%	3163.69
75% Q3	1716.5	95%	2467.5
50% MED	1486	90%	2220.7
25% Q1	1274.75	10%	1173.4
0% MIN	866	5%	1060.2
		1%	891.04
RANGE	3174		
Q3-Q1	441.75		
MODE	1616		

EXTREMES

LOWEST	ID	HIGHEST	ID
866(	122)	2993(	66)
876(	122)	3048(	112)
908(	114)	3125(	65)
927(	114)	3198(	79)
977(	131)	4040(	79)

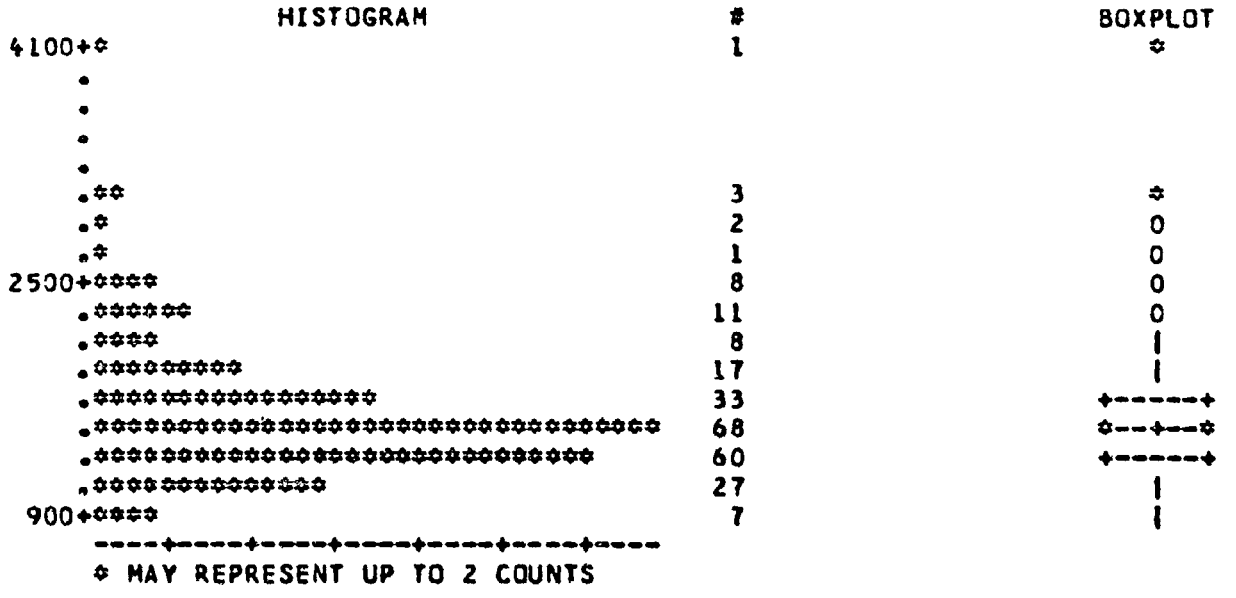
USAF/SCEEE LARGE-SCALE CTS STUDY

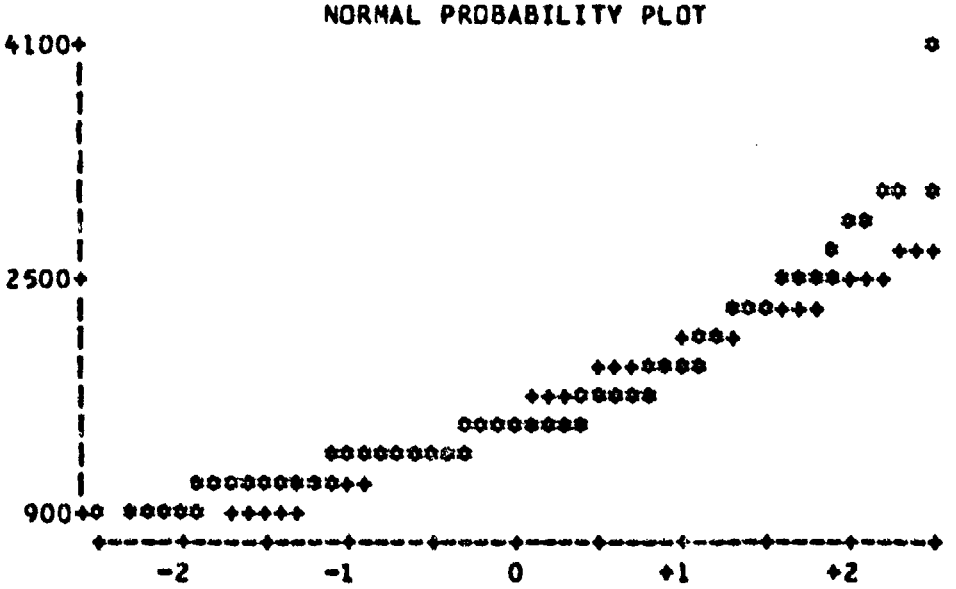
UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=LPMNO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=LPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.899526	SUM	221.283
STD DEV	0.0720014	VARIANCE	0.0051842
SKEWNESS	-1.97656	KURTOSIS	6.00489
USS	200.32	CSS	1.27013
CV	8.00436	STD MEAN	0.00459064
T:MEAN=0	195.948	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.125286	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	0.992366	99%	0.989857
75% Q3	0.947849	95%	0.978495
50% MED	0.915254	90%	0.969371
25% Q1	0.872975	10%	0.815914
0% MIN	0.490566	5%	0.77406
		1%	0.627913
RANGE	0.5018		
Q3-Q1	0.0748733		
MODE	0.9		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.490566(	22)	0.984733(	34)
0.627329(	122)	0.986301(	44)
0.628571(	22)	0.989474(	119)
0.664706(	122)	0.990196(	30)
0.666667(	147)	0.992366(	128)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=LPPCO

STEM	LEAF	#	BOXPLOT
98	01113456902	11	|
96	00111223566666678999000123355678 8	33	|
94	11122234456667888999001133345579	32	+------+
92	00111234445556778801123333566678888899	40	| |
90	00011244666777789901134445555677 88	34	*------*
88	024555677889901112234456777	27	| + |
86	011555667800144556999	21	+------+
84	034802347	9	|
82	1145666893799	13	|
80	70013577	8	|
78	2687	4	|
76	5199	4	|
74	8	1	0
72	4	1	0
70			
68	1	1	0
66	5773	4	0
64			
62	79	2	*
60			
58			
56			
54			
52			
50			
48	1	1	*

MULTIPLY STEM.LEAF BY 10**-02

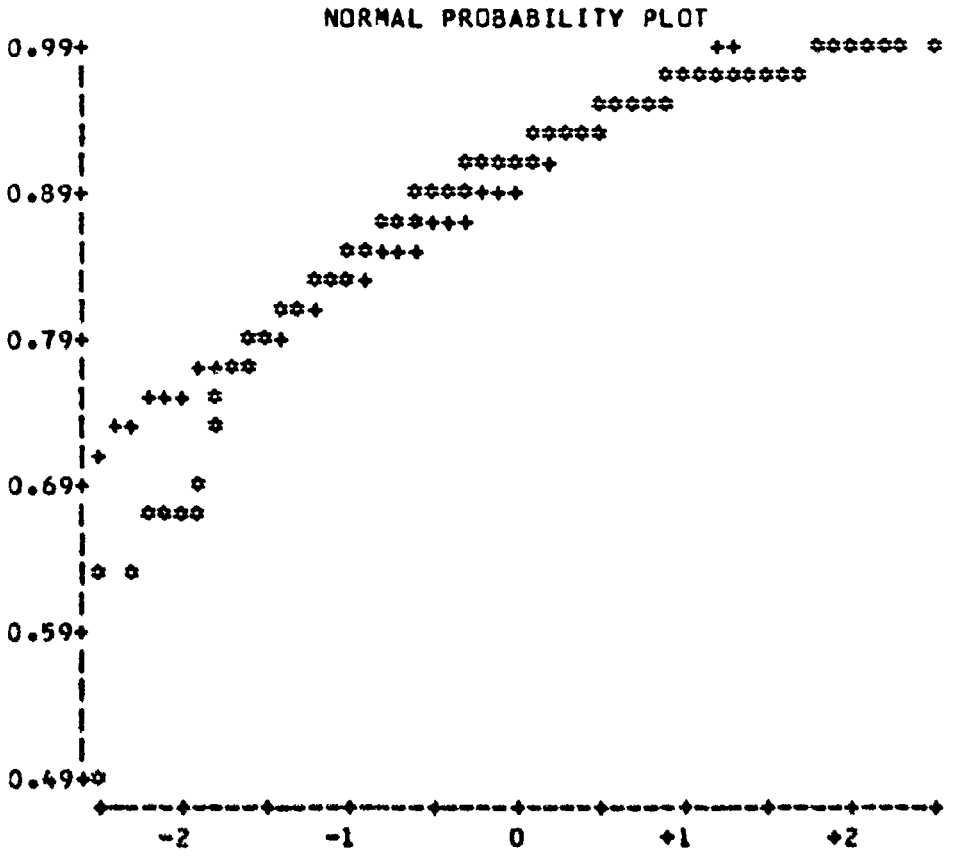
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR LINGUISTIC PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=LPPCO



Appendix A-5

Univariate Summaries - Mathematical Processing

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=MPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	552.154	SUM	135830
STD DEV	184.75	VARIANCE	34132.7
SKEWNESS	1.59301	KURTOSIS	3.92502
USS	83361642	CSS	8362500
CV	33.4599	STD MEAN	11.7792
T:MEAN=0	46.8752	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.14934	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1570	99%	1175.16
75% Q3	631.5	95%	918.65
50% MED	502	90%	823.9
25% Q1	418	10%	373.7
0% MIN	275	5%	346.7
		1%	312.35
RANGE	1295		
Q3-Q1	213.5		
MODE	468		

EXTREMES

LOWEST	ID	HIGHEST	ID
275(	38)	1001(	44)
310(	123)	1065(	70)
315(	11)	1084(	80)
323(	38)	1256(	70)
328(	143)	1570(	36)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=MP4NO

STEM	LEAF	#	BOXPLOT
15	7	1	*
15			
14			
14			
13			
13			
12	6	1	0
12			
11			
11			
10	68	2	0
10	00	2	0
9	6	1	0
9	0223344	7	|
8	5667889	7	|
8	000112334	9	|
7	77888999	8	|
7	000012334	9	|
6	555678899	9	|
6	012222222333334444	18	+------+
5	555555666777888899	19	| + |
5	000000000011111122222222233344444	34	*------*
4	555555666666666667777777777888888889999999	42	| |
4	000000111111111112222222333333444444	37	+------+
3	55555666667777778888999999999	29	|
3	1123333444	10	|
2	7	1	|

MULTIPLY STEM.LEAF BY 10**+02

USAF/SCEEE LARGE-SCALE CTS STUDY

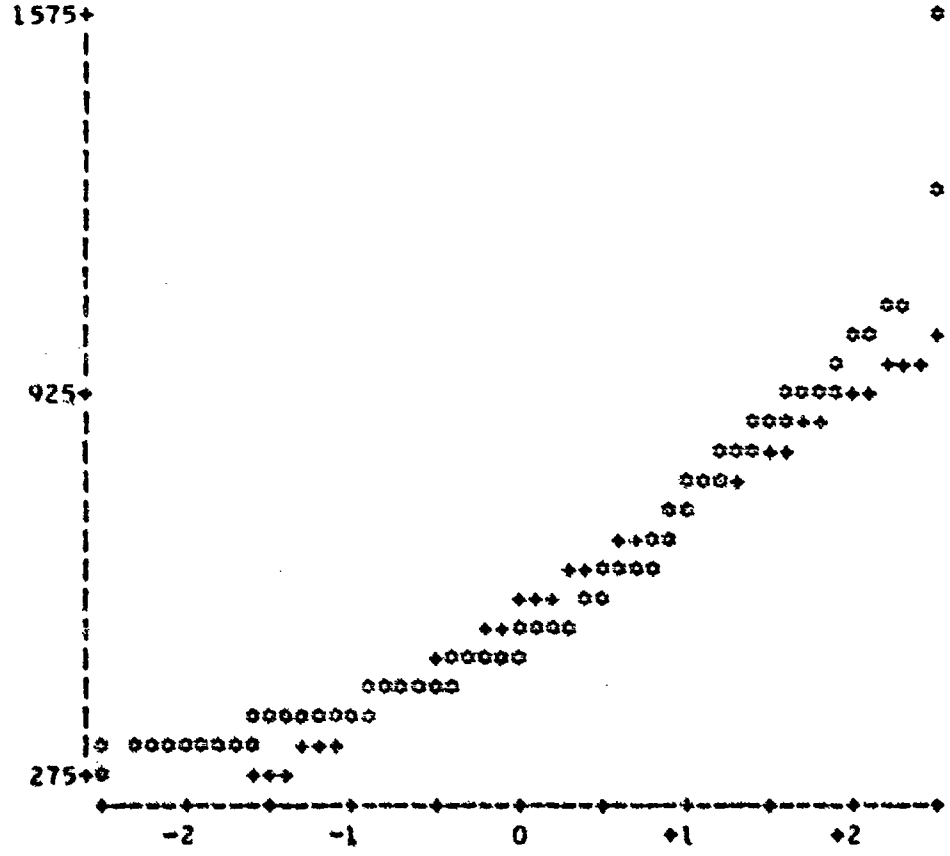
UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=MPMNO

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=MPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.96859	SUM	238.273
STD DEV	0.0252037	VARIANCE	.000635227
SKEWNESS	-1.36658	KURTOSIS	2.09102
USS	230.945	CSS	0.155631
CV	2.6021	STD MEAN	0.00160693
T:MEAN=0	602.758	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.106337	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.987261	95%	1
50% MED	0.973475	90%	0.994012
25% Q1	0.957371	10%	0.937483
0% MIN	0.879781	5%	0.91641
		1%	0.882466
RANGE	0.120219		
Q3-Q1	0.0298901		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.879781(	138)	1(	61)
0.88(	108)	1(	66)
0.885246(	36)	1(	70)
0.887179(	53)	1(	80)
0.890173(	131)	1(	141)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=MPPCO

STEM	LEAF	#	BOXPLOT
100	00000000000000000	17	|
99	5	1	|
99	22222222333333344444444444444	29	|
98	566677777777777888888999	23	+------+
98	11111112222222333333333444	25	| |
97	55566666667777777788899999	26	| |
97	00`111122222223344	18	*------*
96	5555666667777788899999	21	| * |
96	1112222333344444	16	| |
95	55667888999999	14	+------+
95	011111223344444	15	|
94	5567777899	10	|
94	022444	6	|
93	78	2	|
93	033	3	|
92	668	3	|
92	00112	5	|
91	5	1	|
91	4	1	|
90			
90	3	1	0
89	69	2	0
89	011	3	0
88	57	2	0
88	00	2	0
87			0

MULTIPLY STEM.LEAF BY 10**-02

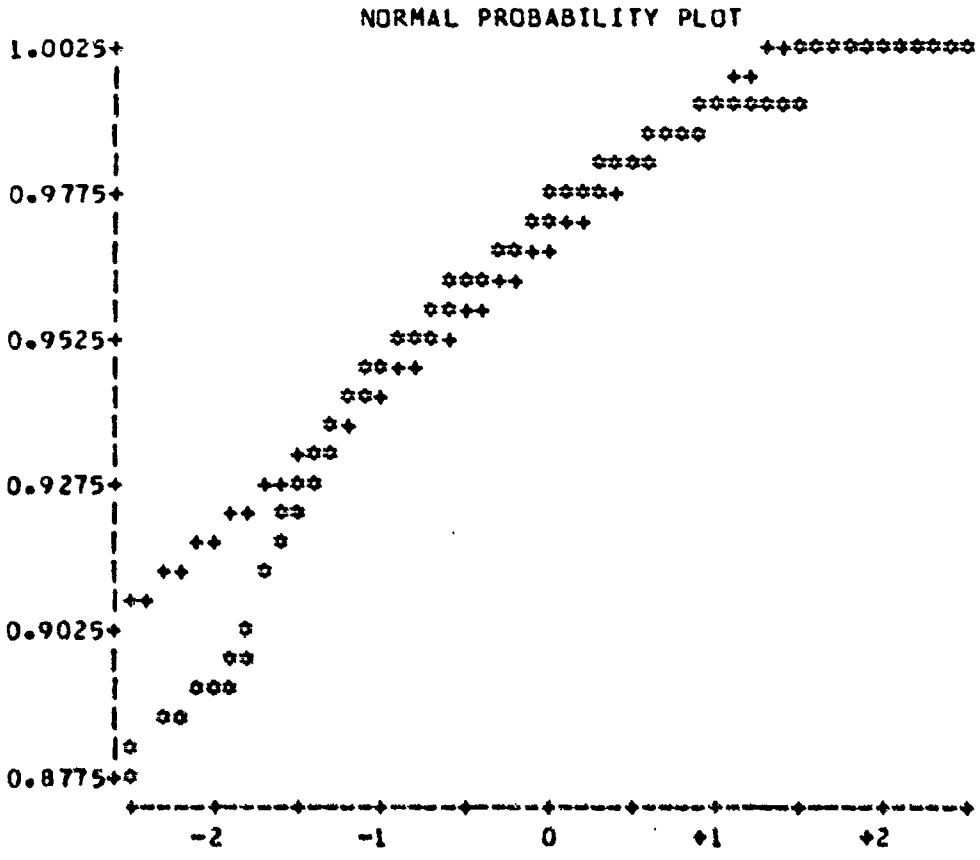
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=MPPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	1496.28	SUM	368086
STD DEV	578.934	VARIANCE	335164
SKEWNESS	1.143	KURTOSIS	1.42572
USS	632876688	CSS	82115292
CV	38.6914	STD MEAN	36.9115
T:MEAN=0	40.5371	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.127098	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	3672	99%	3480.08
75% Q3	1804.75	95%	2632.45
50% MED	1316	90%	2296.1
25% Q1	1098.5	10%	896.6
0% MIN	535	5%	764
		1%	602.25
RANGE	3137		
Q3-Q1	706.25		
MODE	1112		

EXTREMES

LOWEST	ID	HIGHEST	ID
535(	69)	3195(	65)
567(	53)	3390(	10)
642(	53)	3408(	36)
662(	69)	3544(	10)
672(	50)	3672(	147)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=MEDIUM

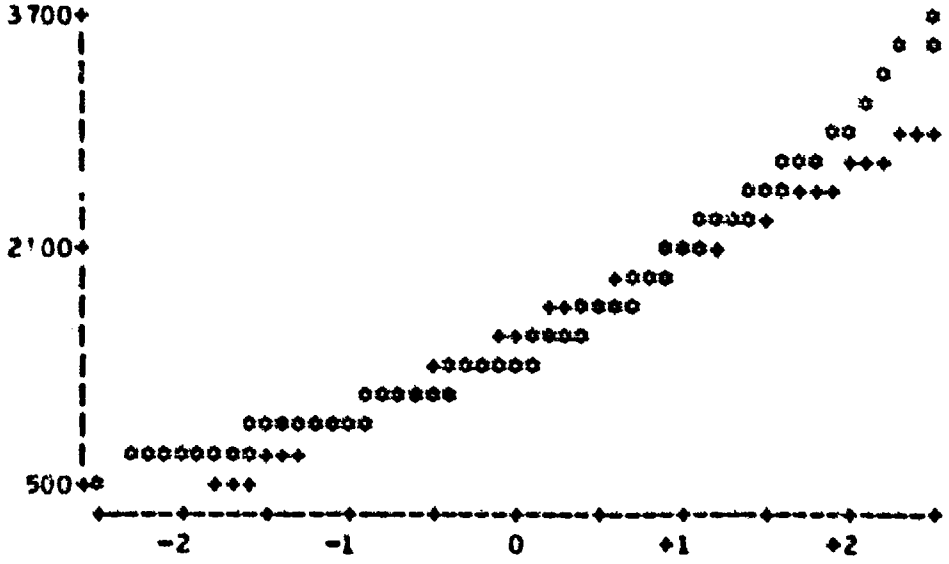
UNIVARIATE

VARIABLE=MPMNO

STEM	LEAF	#	BOXPLOT
36		1	0
34		2	0
32		1	0
30		1	0
28		3	0
26		6	|
24		5	|
22		14	|
20		10	|
18		19	+------+
16		23	| |
14		28	| + |
12		48	*------*
10		41	+------+
8		30	|
6		12	|
4		2	|

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.973107	SUM	239.384
STD DEV	0.028649	VARIANCE	.000820764
SKEWNESS	-2.04387	KURTOSIS	6.30774
USS	233.148	CSS	0.201087
CV	2.94407	STD MEAN	0.00182659
T:MEAN=0	532.745	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.173943	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.990446	95%	1
50% MED	0.980392	90%	1
25% Q1	0.959796	10%	0.938682
0% MIN	0.821429	5%	0.915338
		1%	0.838613
RANGE	0.178571		
Q3-Q1	0.0306498		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.821429(	36)	1(	144)
0.830769(	65)	1(	144)
0.847458(	2)	1(	145)
0.888889(	124)	1(	146)
0.892857(	89)	1(	150)

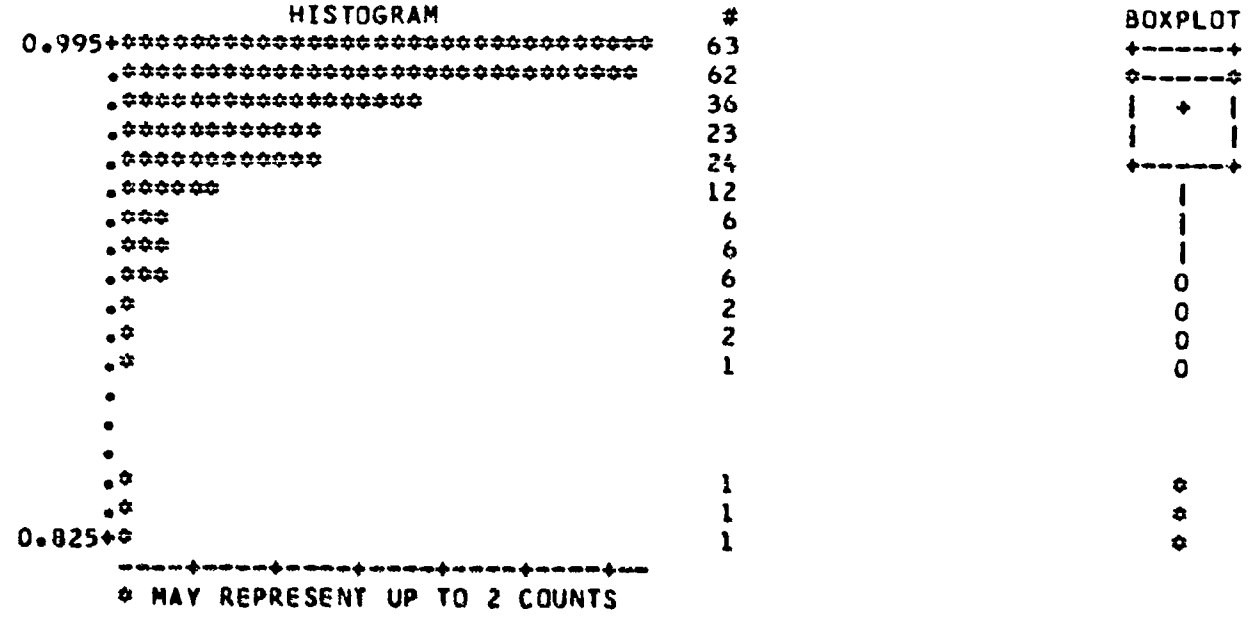
USAF/SCEEE LARGE-SCALE CTS STUDY

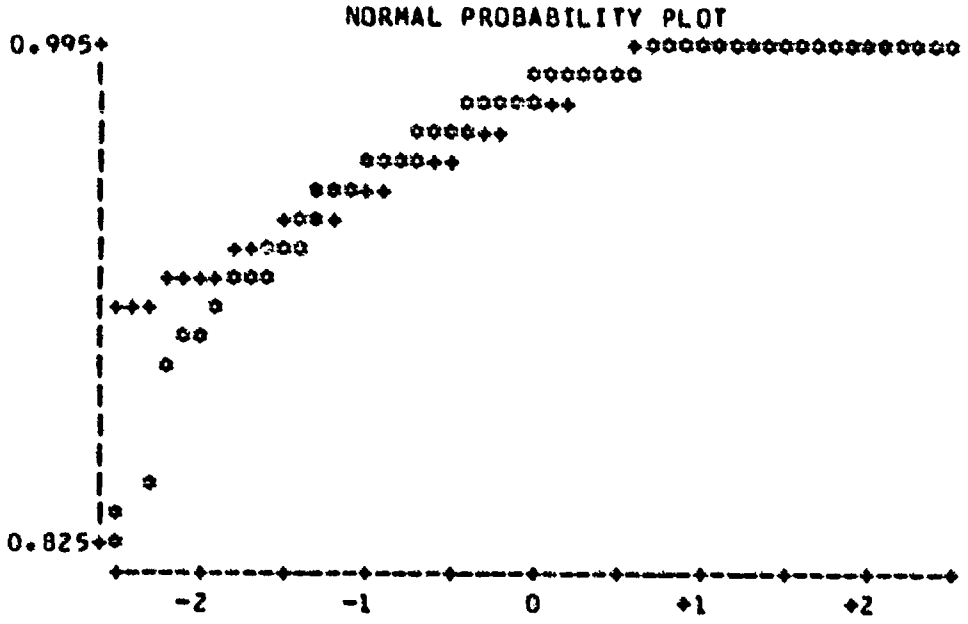
UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MPPCO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=MPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	2579.17	SUM	634476
STD DEV	993.077	VARIANCE	986201
SKEWNESS	0.862492	KURTOSIS	0.639103
USS	1878041186	CSS	241619257
CV	38.5037	STD MEAN	63.3162
T:MEAN=0	40.7347	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.1039	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	6248	99%	5744.23
75% Q3	3236.75	95%	4519
50% MED	2324.5	90%	3898.2
25% Q1	1814.75	10%	1470
0% MIN	852	5%	1280.15
		1%	999.58
RANGE	5396		
Q3-Q1	1422		
MODE	2047		

EXTREMES

LOWEST	ID	HIGHEST	ID
852(	69)	4873(	70)
946(	69)	4929(	91)
1060(	143)	5272(	91)
1071(	28)	6163(	10)
1072(	123)	6248(	10)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=MPMNO

STEM	LEAF	#	BOXPLOT
62	5	1	0
60	6	1	0
58			
56			
54			
52	7	1	
50			
48	573	3	
46	70379	5	
44	093	3	
42	27155	5	
40	6056	4	
38	267900	6	
36	46792778	8	
34	01334459256	11	
32	02234456990012479	17	
30	00122823356	11	
28	24578901222446689	17	
26	02339911488	11	
24	11246791345567	14	
22	022334455888899901236779	24	
20	001233344555558134556 99	23	
18	001122344577881234555799	24	
16	011223455711445566677 89	23	
14	1235568911256889	16	
12	0347035589	10	
10	677779	6	
8	55	2	

MULTIPLY STEM.LEAF BY 10**+02

USAF/SCEEE LARGE-SCALE CTS STUDY

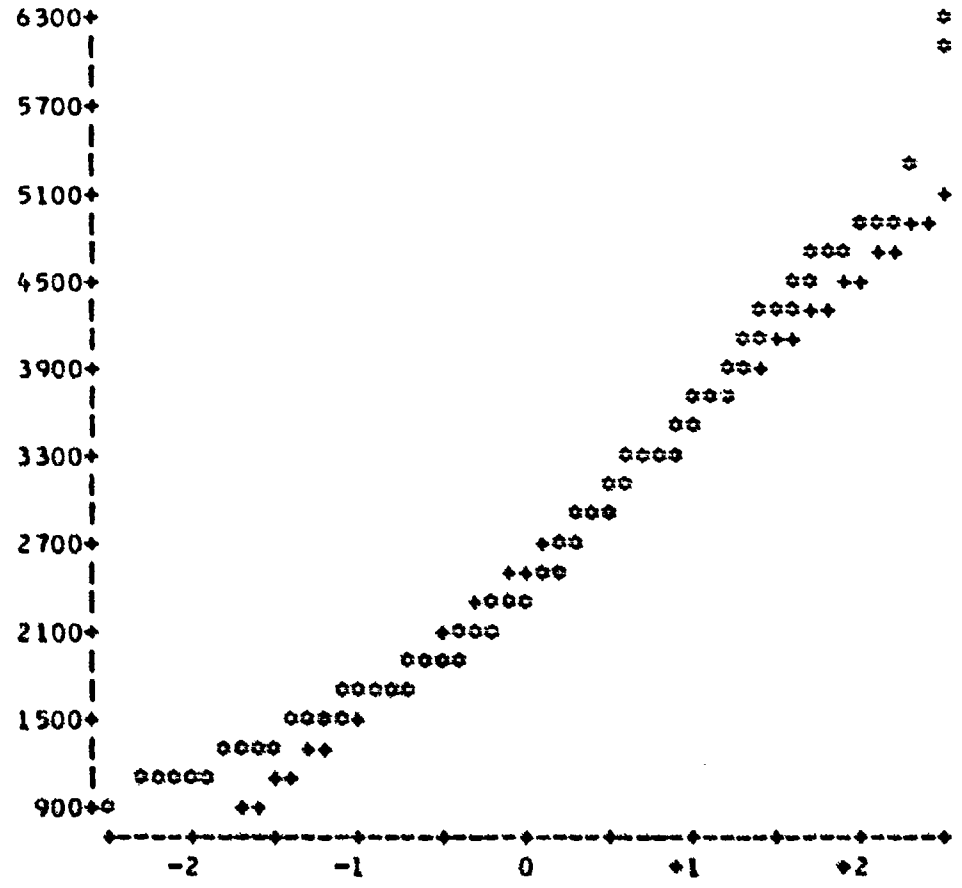
UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=MPMNO

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=MPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.966906	SUM	237.859
STD DEV	0.0451771	VARIANCE	0.00204097
SKEWNESS	-5.08119	KURTOSIS	46.2889
USS	230.487	CSS	0.500037
CV	4.67233	STD MEAN	0.00288038
T:MEAN=0	335.687	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.231921	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	1	95%	1
50% MED	0.976732	90%	1
25% Q1	0.952189	10%	0.918958
0% MIN	0.5	5%	0.893793
		1%	0.833518
RANGE	0.5		
Q3-Q1	0.0478111		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.5(	36)	1(	129)
0.810345(	124)	1(	133)
0.859649(	64)	1(	141)
0.862069(	147)	1(	144)
0.867925(	132)	1(	144)

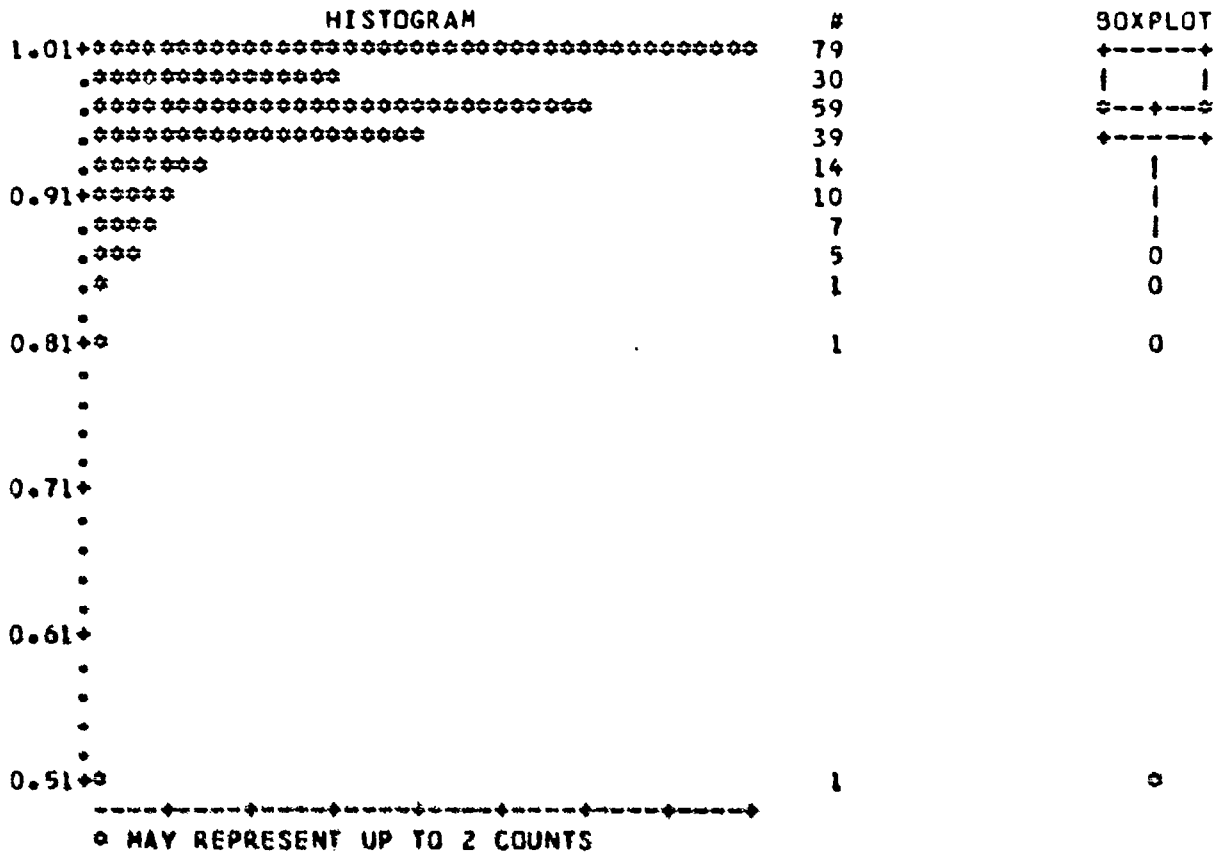
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=MPPCO



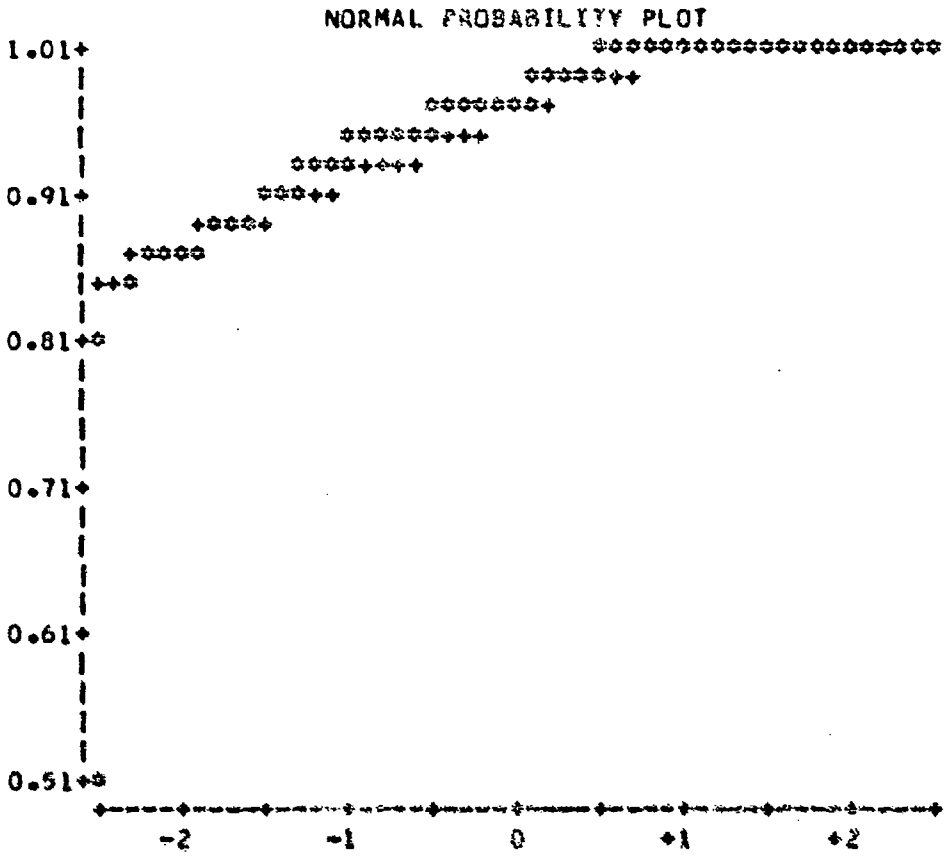
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MATHEMATICAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=MPPCO



Appendix A-6

Univariate Summaries - Memory Search

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=LOW

UNIVARIATE

VARIABLE=MSMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	444.98	SUM	109465
STD DEV	70.7277	VARIANCE	5002.4
SKEWNESS	1.72271	KURTOSIS	4.53016
USS	49935289	CSS	1225589
CV	15.8946	STD MEAN	4.50943
T:MEAN=0	98.6776	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.130623	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	802	99%	749.42
75% Q3	476.25	95%	590.25
50% MED	426	90%	540
25% Q1	399	10%	378
0% MIN	335	5%	362.7
		1%	344.35
RANGE	467		
Q3-Q1	77.25		
MODE	395		

EXTREMES

LOWEST	ID	HIGHEST	ID
335(	123)	624(	120)
342(	21)	634(	147)
347(	27)	742(	60)
350(	50)	756(	70)
351(	53)	802(	17)

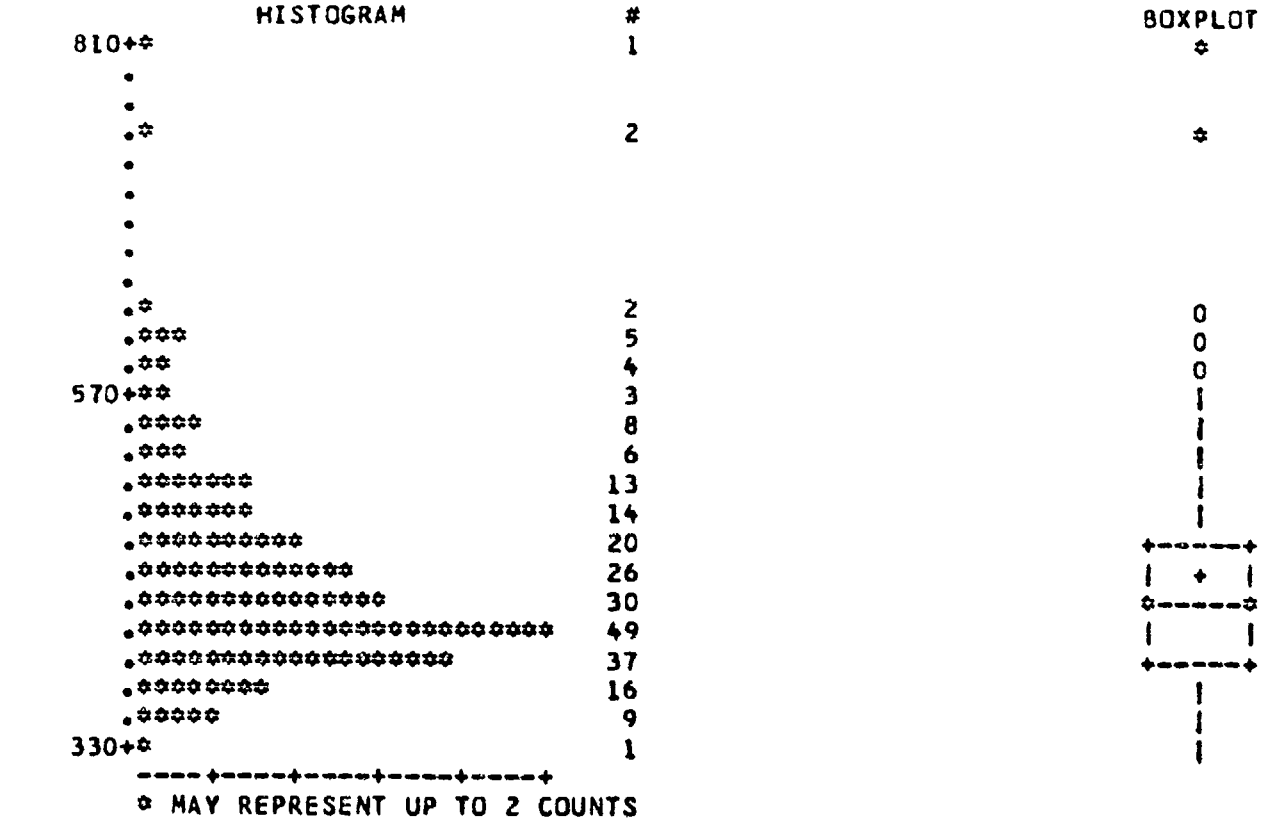
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=LOW

UNIVARIATE

VARIABLE=MSMNO



USAF/SCEEE LARGE-SCALE CTS STUDY

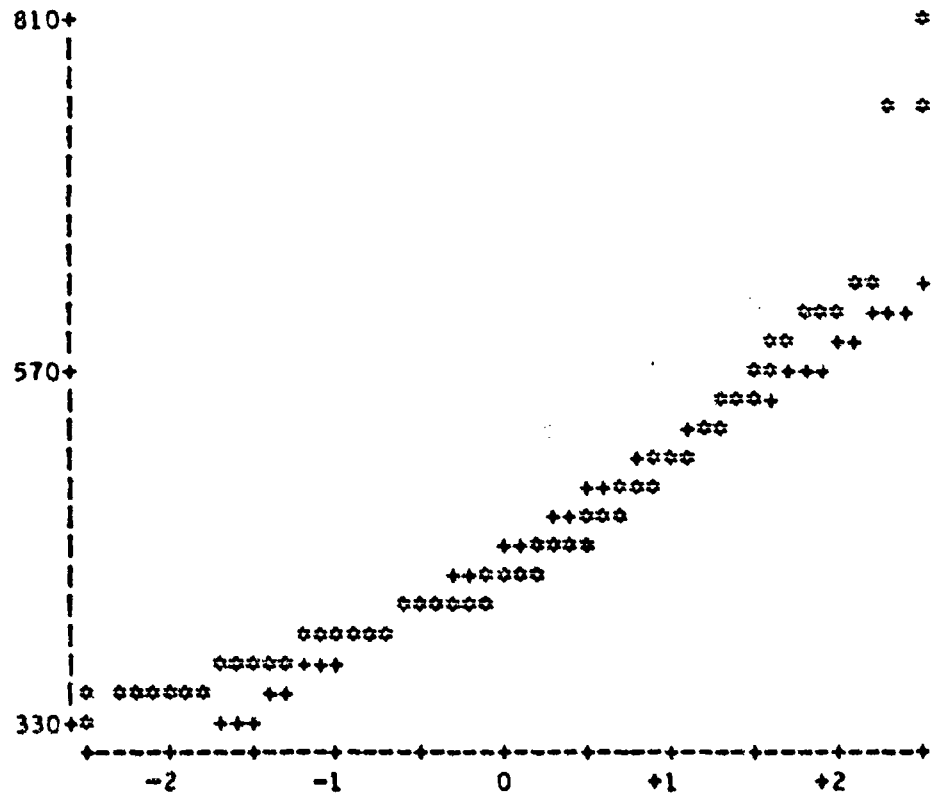
UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=LOW

UNIVARIATE

VARIABLE=MSMNO

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=LOW

UNIVARIATE

VARIABLE=MSPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.972353	SUM	239.199
STD DEV	0.0321949	VARIANCE	0.00103651
SKEWNESS	-6.00357	KURTOSIS	60.4944
USS	232.84	CSS	0.253945
CV	3.31103	STD MEAN	0.00205267
T:MEAN=0	473.702	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.19524	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.989455	95%	1
50% MED	0.979451	90%	0.996509
25% Q1	0.962674	10%	0.942953
0% MIN	0.616935	5%	0.92535
		1%	0.874537
RANGE	0.383065		
Q3-Q1	0.0267815		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.616935(	23)	1(	78)
0.874126(	55)	1(	91)
0.875(	68)	1(	94)
0.890034(	68)	1(	104)
0.909396(	105)	1(	142)

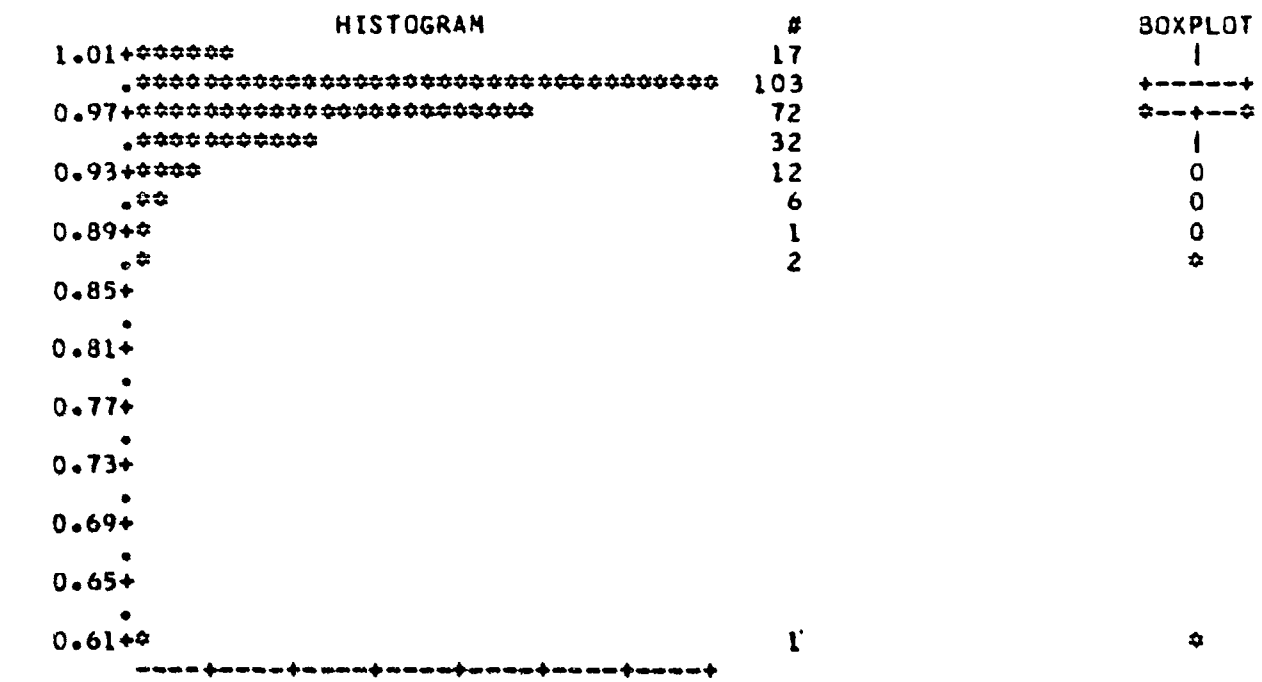
USAF/SCEEE LARGE-SCALE CTS STUDY

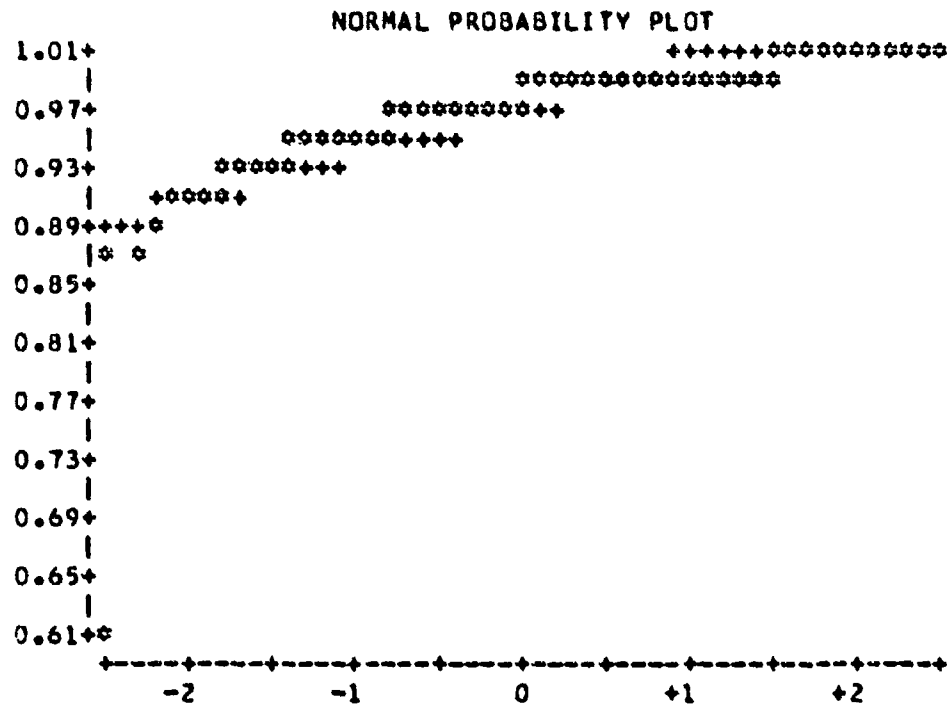
UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=LOW

UNIVARIATE

VARIABLE=MSPCO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MSMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	598.463	SUM	147222
STD DEV	129.482	VARIANCE	16765.6
SKEWNESS	2.16035	KURTOSIS	7.16642
USS	92214558	CSS	4107577
CV	21.6358	STD MEAN	8.25548
T:MEAN=0	72.4929	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
D:NORMAL	0.146909	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1299	99%	1235.48
75% Q3	644.25	95%	840.55
50% MED	560	90%	769.1
25% Q1	521.25	10%	480.4
0% MIN	437	5%	465.35
		1%	440.41
RANGE	862		
Q3-Q1	123		
MODE	524		

EXTREMES

LOWEST	ID	HIGHEST	ID
437(	27)	948(	17)
439(	114)	962(	70)
442(	87)	1227(	44)
449(	47)	1243(	65)
450(	123)	1299(	65)

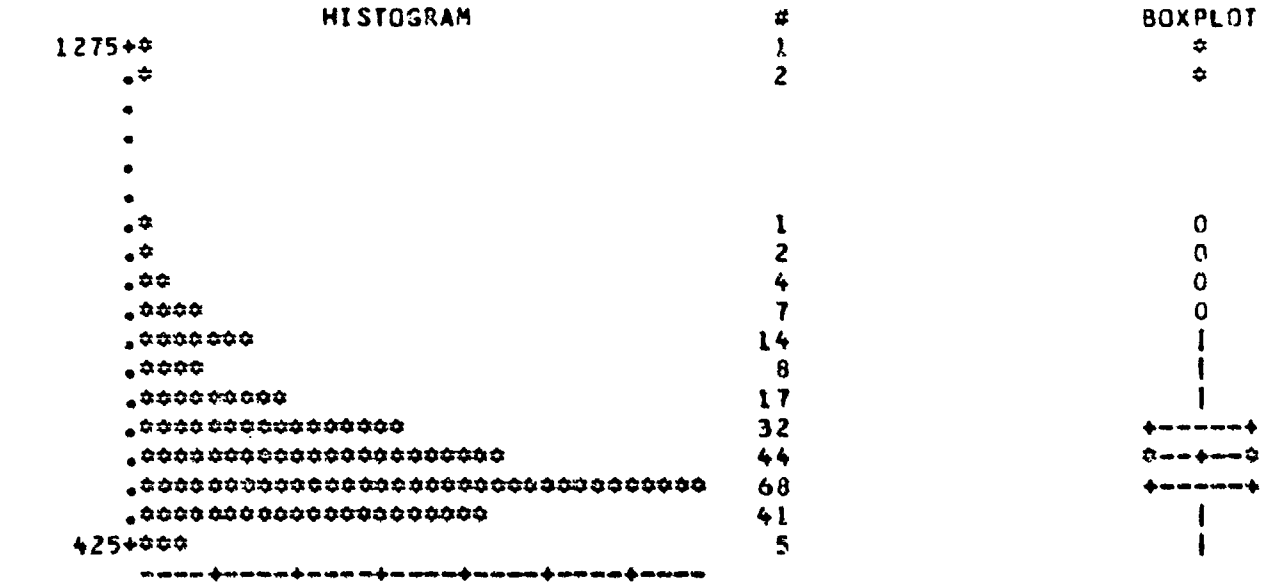
USAF/SCEEE LARGE-SCALE CTS STUDY

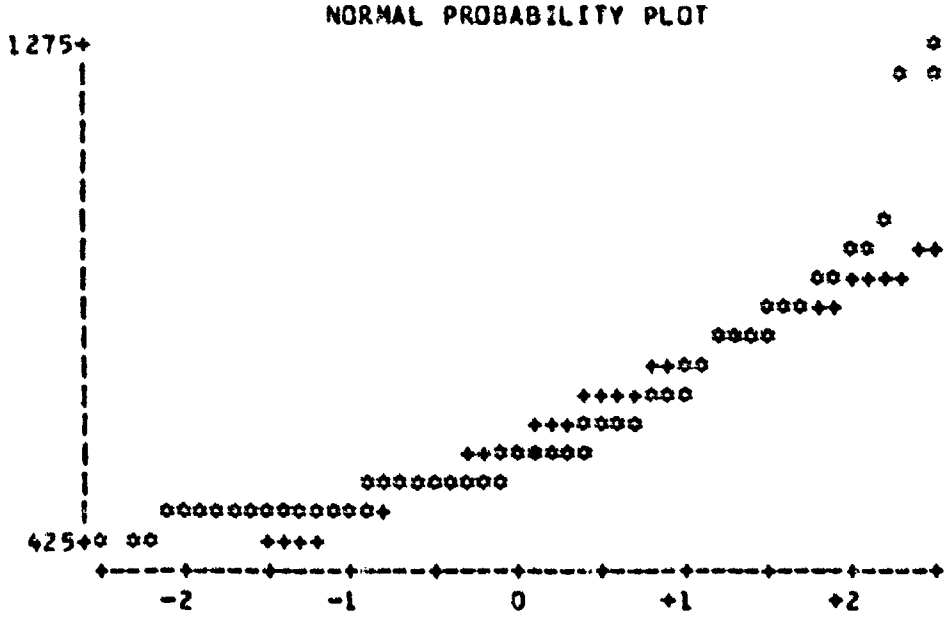
UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MSMNO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MSPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.955879	SUM	235.146
STD DEV	0.0450251	VARIANCE	0.00202726
SKEWNESS	-4.52196	KURTOSIS	33.0238
USS	225.268	CSS	0.496678
CV	4.71033	STD MEAN	0.00287069
T:MEAN=0	332.978	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.163562	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.98072	95%	1
50% MED	0.96569	90%	0.991805
25% Q1	0.937708	10%	0.917713
0% MIN	0.561265	5%	0.895651
		1%	0.729731
RANGE	0.438735		
Q3-Q1	0.0430115		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.561265(	23)	1(	80)
0.638655(	65)	1(	127)
0.832432(	66)	1(	146)
0.835749(	115)	1(	146)
0.841667(	44)	1(	150)

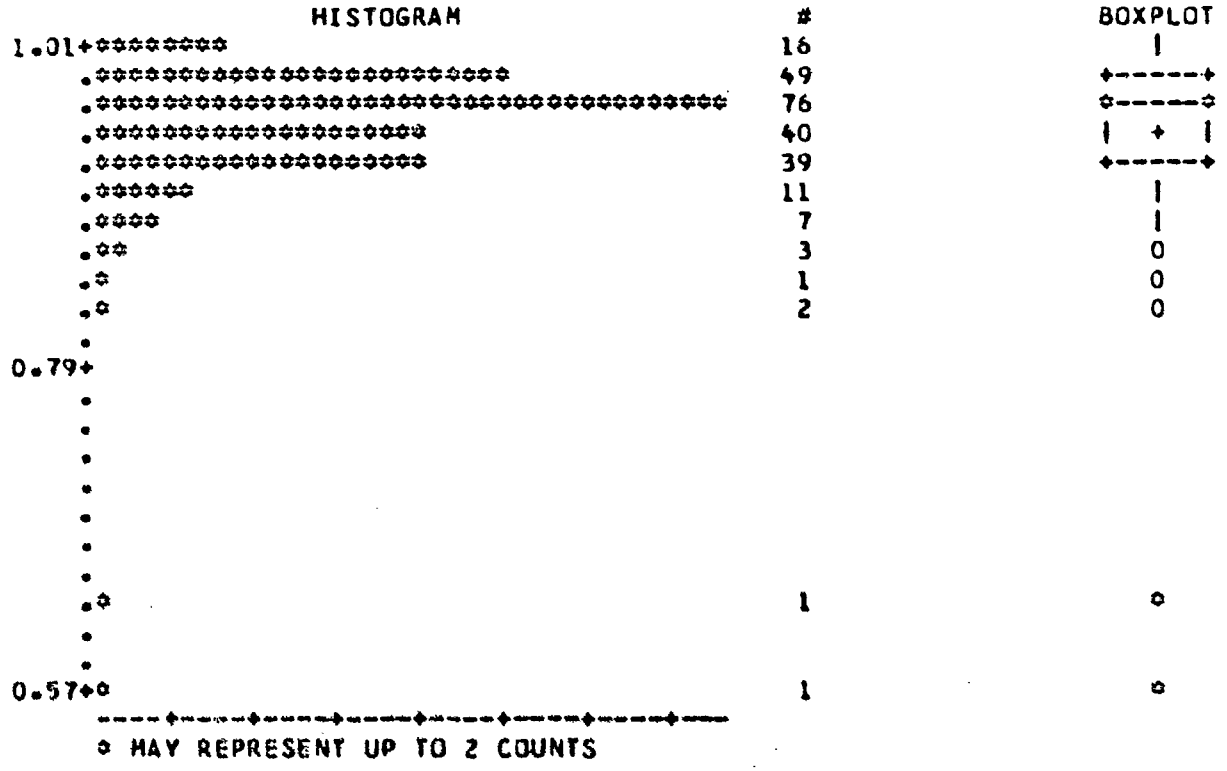
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MSPCO



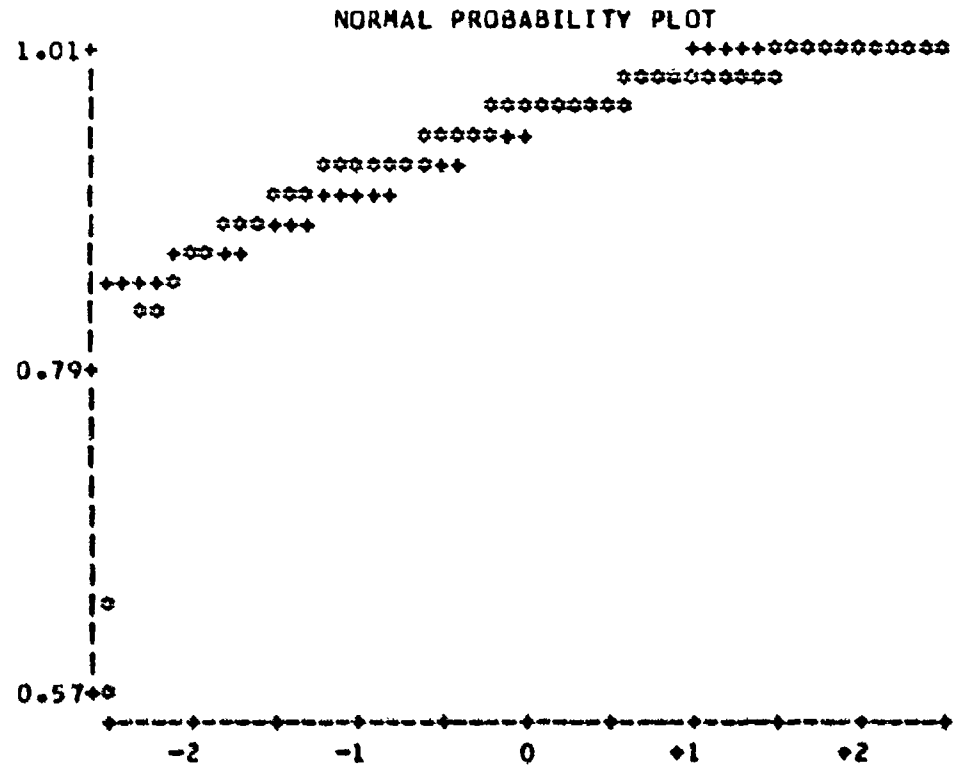
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=MSPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=HIGH

UNIVARIATE

VARIABLE=MSMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	725.878	SUM	178566
STD DEV	164.465	VARIANCE	27048.9
SKEWNESS	0.993195	KURTOSIS	0.597955
USS	136244110	CSS	6626970
CV	22.6574	STD MEAN	10.4859
T:MEAN=0	69.224	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.12156	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1321	99%	1209.43
75% Q3	836	95%	1051.25
50% MED	685.5	90%	955.5
25% Q1	601.75	10%	556.7
0% MIN	457	5%	529.4
		1%	481.76
RANGE	864		
Q3-Q1	234.25		
MODE	556		

EXTREMES

LOWEST	ID	HIGHEST	ID
457(	21)	1187(	22)
478(	114)	1190(	65)
486(	38)	1193(	44)
492(	53)	1224(	36)
500(	122)	1321(	65)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=HIGH

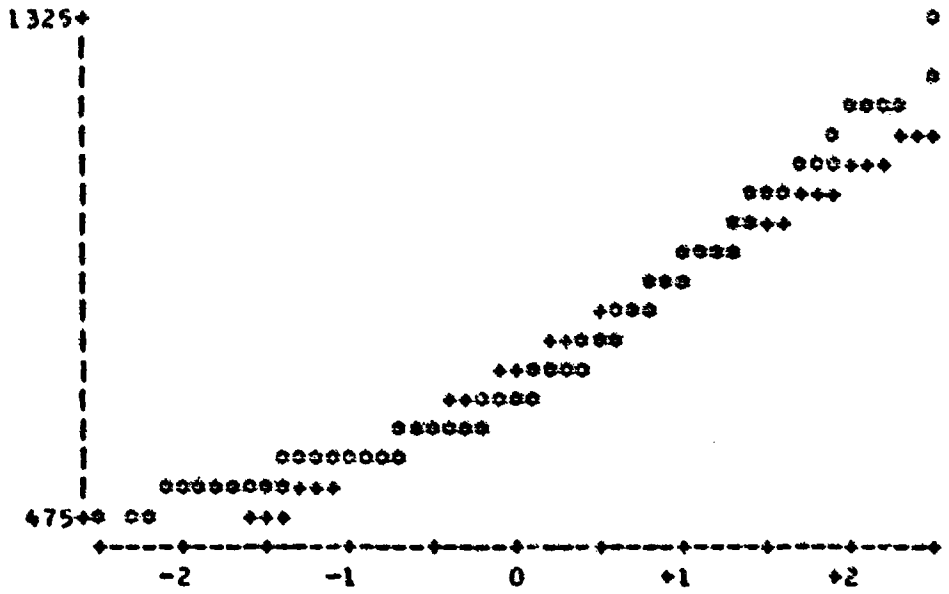
UNIVARIATE

VARIABLE=MSMNO

STEM	LEAF	#	BOXPLOT
13	2	1	0
12			
12	2	1	0
11	7999	4	0
11	0	1	|
10	556789	6	|
10	112234	6	|
9	5567799	7	|
9	000111122233334	15	|
8	5555666778889999	16	|
8	001222223334444	15	+-----+
7	5555666678899999	16	| |
7	000000111222233333334444	24	| + |
6	55555555566666677888889999999999999	33	o-----o
6	00000000000011111111112222223333333333344444444	47	+-----+
5	55666666667777777888888999999999999	35	|
5	011112233344444	15	|
4	6899	4	|

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=HIGH

UNIVARIATE

VARIABLE=MSPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.892767	SUM	219.621
STD DEV	0.0684191	VARIANCE	0.00468117
SKEWNESS	-1.18186	KURTOSIS	3.09377
USS	197.217	CSS	1.14689
CV	7.66371	STD MEAN	0.00436224
T:MEAN=0	204.638	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
GAUSSIAN	0.0695882	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	0.994969
75% Q3	0.945846	95%	0.980783
50% MED	0.89598	90%	0.973236
25% Q1	0.856149	10%	0.81312
0% MIN	0.530612	5%	0.764318
		1%	0.67518
RANGE	0.469388		
Q3-Q1	0.0896975		
MODE	0.83871		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.530612(	23)	0.986547(	142)
0.657025(	55)	0.988701(	104)
0.695652(	65)	0.99422(	109)
0.711111(	19)	0.995633(	128)
0.719807(	66)	1(	128)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=HIGH

UNIVARIATE

VARIABLE=MSPCO

STEM	LEAF	#	BOXPLOT
100	0	1	
98	0112222357946	13	
96	22225555566788990122233344555678889	34	
94	0123355666900233678889	21	
92	013333566779999001245677778	26	
90	123444555667772336899999	23	
88	011112234589912444555667788	27	
86	122455680001344444567778999999	30	
84	24466778999333456667888888899	28	
82	248890245678999	15	
80	06677933344	11	
78	0	1	
76	228059	6	
74	5	1	
72	00578	5	0
70	1	1	0
68	6	1	0
66			
64	7	1	0
62			
60			
58			
56			
54			
52	1	1	*

MULTIPLY STEM.LEAF BY 1000-02

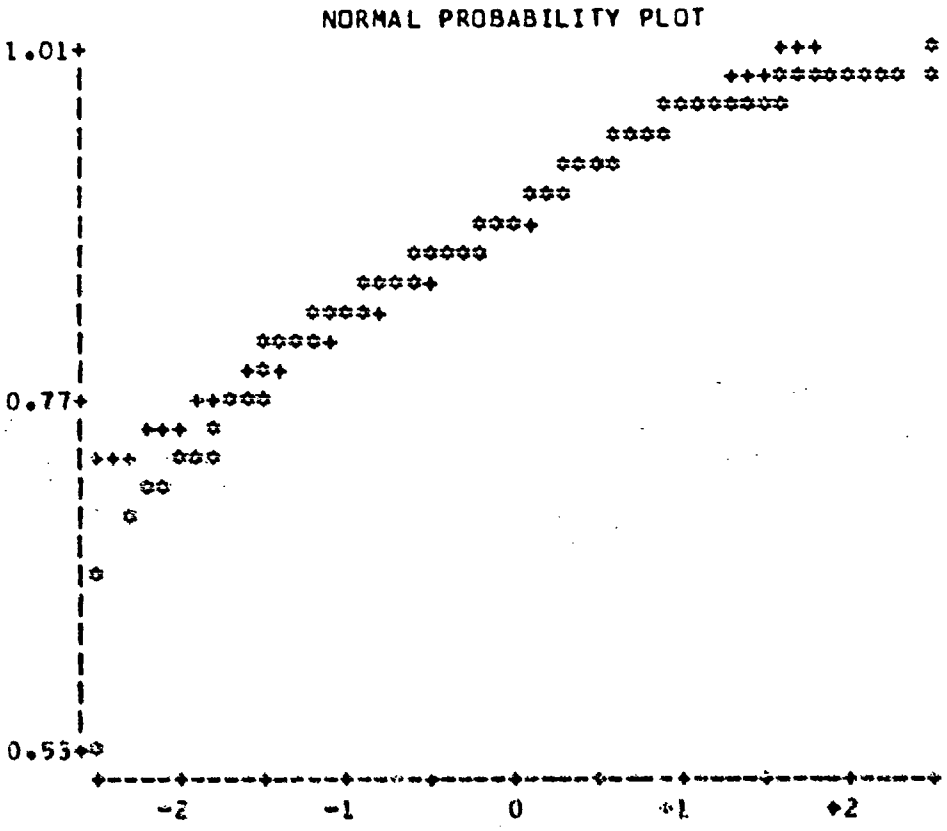
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR MEMORY SEARCH

LEVEL=HIGH

UNIVARIATE

VARIABLE=MSPCO



Appendix A-7

Univariate Summaries - Probability Monitoring

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMRT

MOMENTS

N	246	SUM WGTS	246
MEAN	8.49539	SUM	2089.87
STD DEV	3.88233	VARIANCE	15.0725
SKEWNESS	1.66885	KURTOSIS	5.14799
USS	21447	CSS	3692.76
CV	45.6992	STD MEAN	0.247528
T:MEAN=0	34.3209	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.117034	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	29.8	99%	25.0435
75% Q3	10.9167	95%	15.0433
50% MED	7.5	90%	13.4433
25% Q1	5.79167	10%	4.45667
0% MIN	2.46667	5%	3.91167
		1%	3.092
RANGE	27.3333		
Q3-Q1	5.125		
MODE	6.63333		

EXTREMES

LOWEST	ID	HIGHEST	ID
2.46667(	137)	17.9333(	80)
2.96667(	74)	18.2667(	72)
3.23333(	63)	22.95(	91)
3.35(	5)	26.9(	138)
3.4(	78)	29.8(	124)

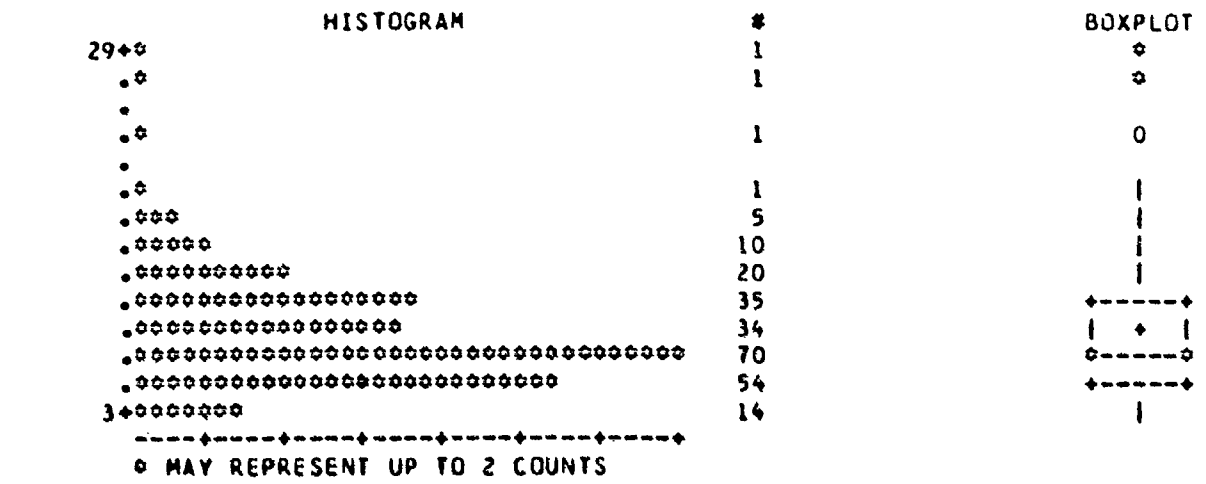
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

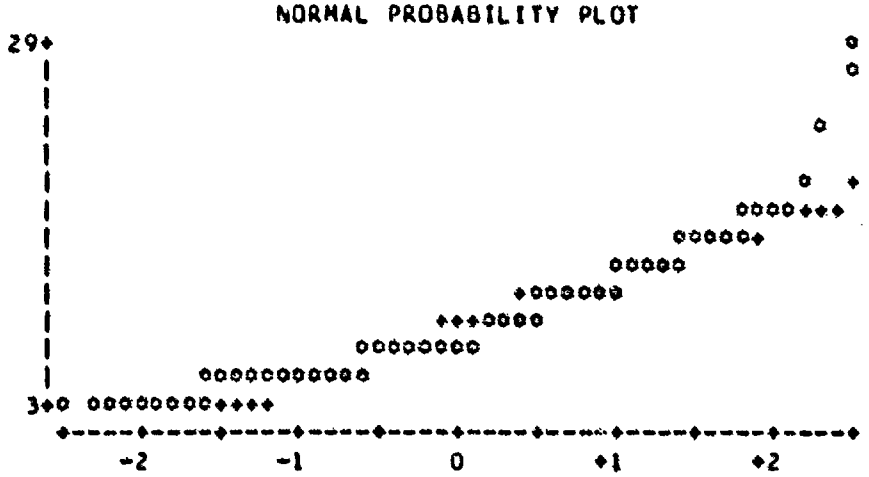
LEVEL=LOW

UNIVARIATE

VARIABLE=PMRT



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMPC

MOMENTS

N	246	SUM WGTS	246
MEAN	0.983062	SUM	241.833
STD DEV	0.0814128	VARIANCE	0.00662804
SKEWNESS	-5.11649	KURTOSIS	27.7047
USS	239.361	CSS	1.62387
CV	8.28155	STD MEAN	0.00519069
T:MEAN=0	189.39	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.537688	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	1	95%	1
50% MED	1	90%	1
25% Q1	1	10%	1
0% MIN	0.333333	5%	1
		1%	0.578333
RANGE	0.666667		
Q3-Q1	0		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.333333(	91)	1(	147)
0.5(	138)	1(	148)
0.666667(	129)	1(	148)
0.666667(	124)	1(	150)
0.666667(	108)	1(	150)

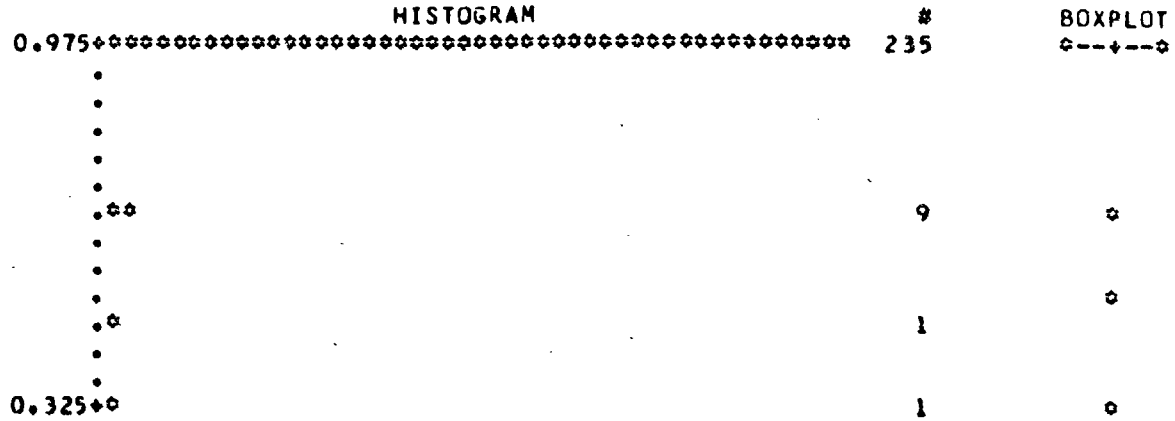
USAF/SCEEE LARGE-SCALE CTS STUDY

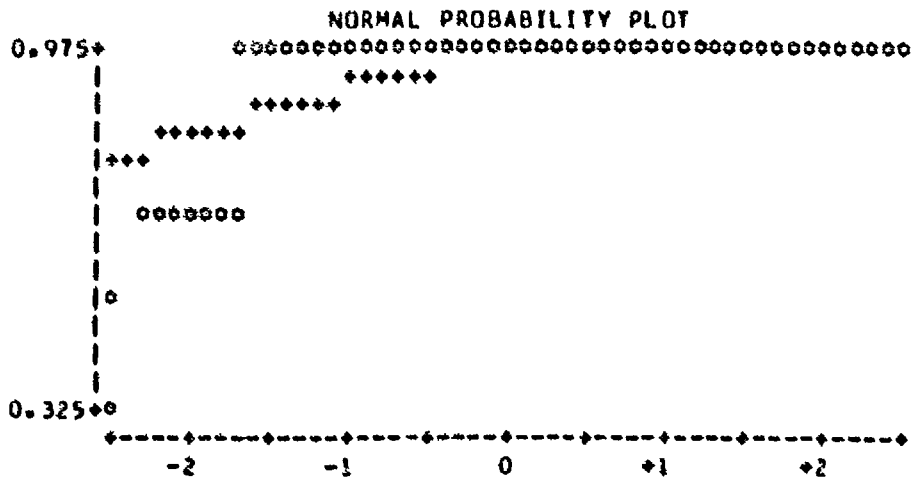
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMPC





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMFA

MOMENTS

N	246	SUM WGTS	246
MEAN	0.321138	SUM	79
STD DEV	0.681026	VARIANCE	0.463796
SKEWNESS	2.38913	KURTOSIS	6.03437
USS	139	CSS	113.63
CV	212.066	STD MEAN	0.0434206
T:MEAN=0	7.39598	PROB>|T|	0.0001
SGN RANK	770	PROB>|S|	0.0001
NUM ¬= 0	55		
D:NORMAL	0.457799	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	4	99%	3
75% Q3	0	95%	2
50% MED	0	90%	1
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	4		
Q3-Q1	0		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	148)	2(	144)
0(	148)	3(	11)
0(	147)	3(	59)
0(	146)	3(	74)
0(	146)	4(	23)

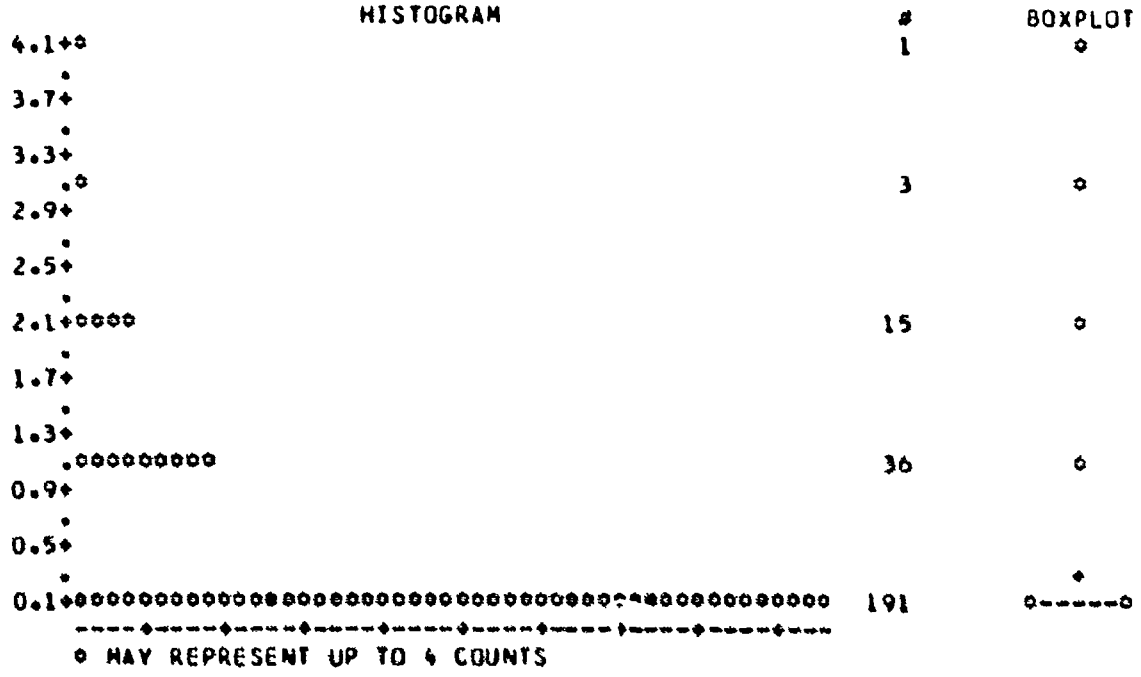
USAF/SCEEE LARGE-SCALE CTS STUDY

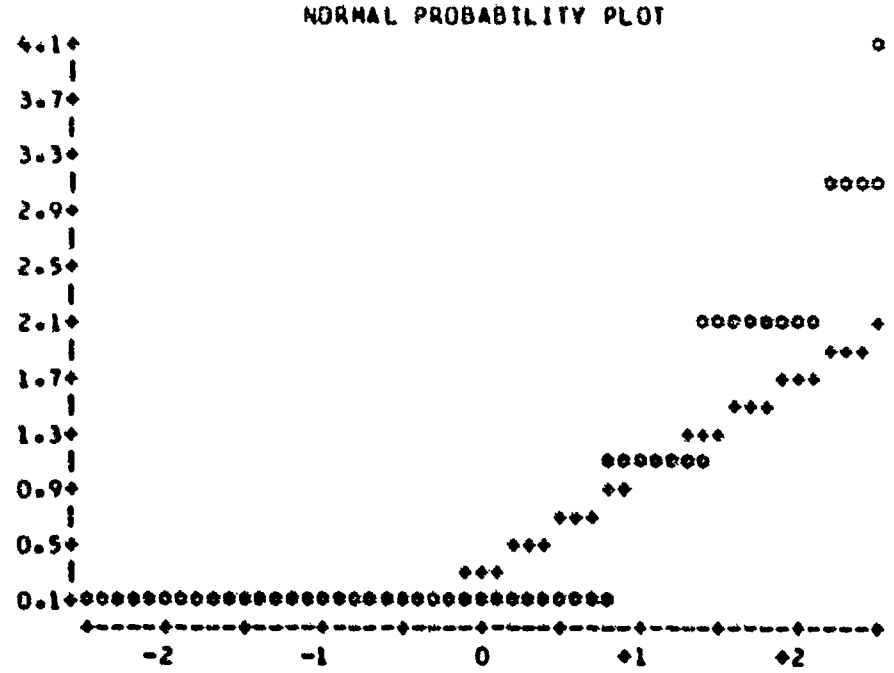
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMFA





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMRT

MOMENTS

N	235	SUM WGTS	235
MEAN	16.2403	SUM	3816.47
STD DEV	5.68662	VARIANCE	32.3376
SKEWNESS	0.331457	KURTOSIS	-0.205572
USS	69547.5	CSS	7567
CV	35.0155	STD MEAN	0.370954
T:MEAN=0	43.7798	PROB>|T|	0.0001
SGN RANK	13865	PROB>|S|	0.0001
NUM ¬= 0	235		
D:NORMAL	0.0455134	PROB>D	>.15

QUANTILES(DEF=4)

100% MAX	30.7	99%	29.914
75% Q3	19.6333	95%	27.04
50% MED	15.9	90%	24.32
25% Q1	12.2333	10%	8.85
0% MIN	4.15	5%	6.80667
		1%	4.62
RANGE	26.55		
Q3-Q1	7.4		
MODE	12.9		

EXTREMES

LOWEST	ID	HIGHEST	ID
4.15(	11)	29.35(	28)
4.2(	58)	29.8(	126)
5.36667(	73)	29.85(	140)
5.95(	69)	29.95(	31)
6(	93)	30.7(	121)

MISSING VALUE	.
COUNT	11
% COUNT/NOBS	4.47

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6.8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMRT

STEM	LEAF	#	BOXPLOT
30	7	1	
29	113889	6	
28	9	1	
27	0246	4	
26	0136	4	
25	012356	6	
24	33	2	
23	1223346	7	
22	014456	6	
21	4555677	7	
20	12345666999	11	
19	01223446666679	14	
18	2233445666779	13	
17	0002234455566679	16	
16	1111223334445577899	19	
15	0001111255666678889	18	
14	012223344577889	15	
13	011134577778	12	
12	000012222233345788889999	23	
11	1134469	7	
10	2334446667889999	16	
9	189	3	
8	0334779	7	
7	12269	5	
6	01233778	8	
5	49	2	
4	12	2	

USAF/SCEEE LARGE-SCALE CTS STUDY

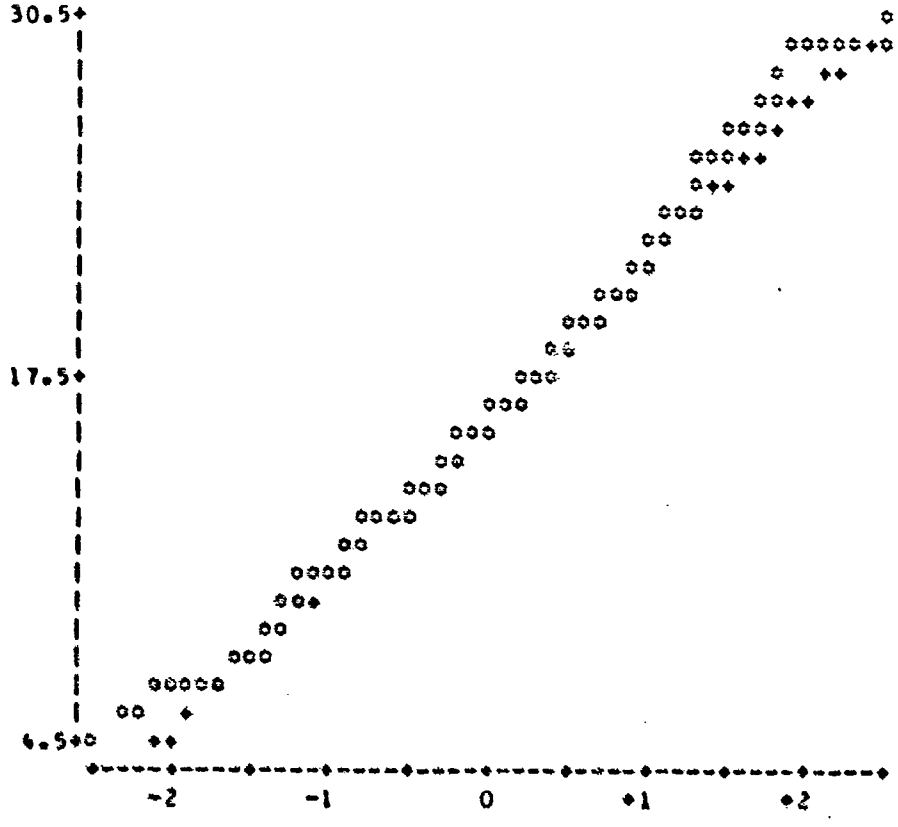
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6.8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMRT

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMPC

MOMENTS

N	246	SUM WGTS	246
MEAN	0.784553	SUM	193
STD DEV	0.270828	VARIANCE	0.0733477
SKEWNESS	-1.16411	KURTOSIS	0.889167
USS	169.389	CSS	17.9702
CV	34.52	STD MEAN	0.0172674
T:MEAN=0	45.4356	PROB>|T|	0.0001
SGN RANK	13865	PROB>|S|	0.0001
NUM ¬= 0	235		
D:NORMAL	0.323428	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	1	95%	1
50% MED	1	90%	1
25% Q1	0.666667	10%	0.5
0% MIN	0	5%	0.333333
		1%	0
RANGE	1		
Q3-Q1	0.333333		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	138)	1(	145)
0(	132)	1(	146)
0(	131)	1(	147)
0(	116)	1(	148)
0(	88)	1(	150)

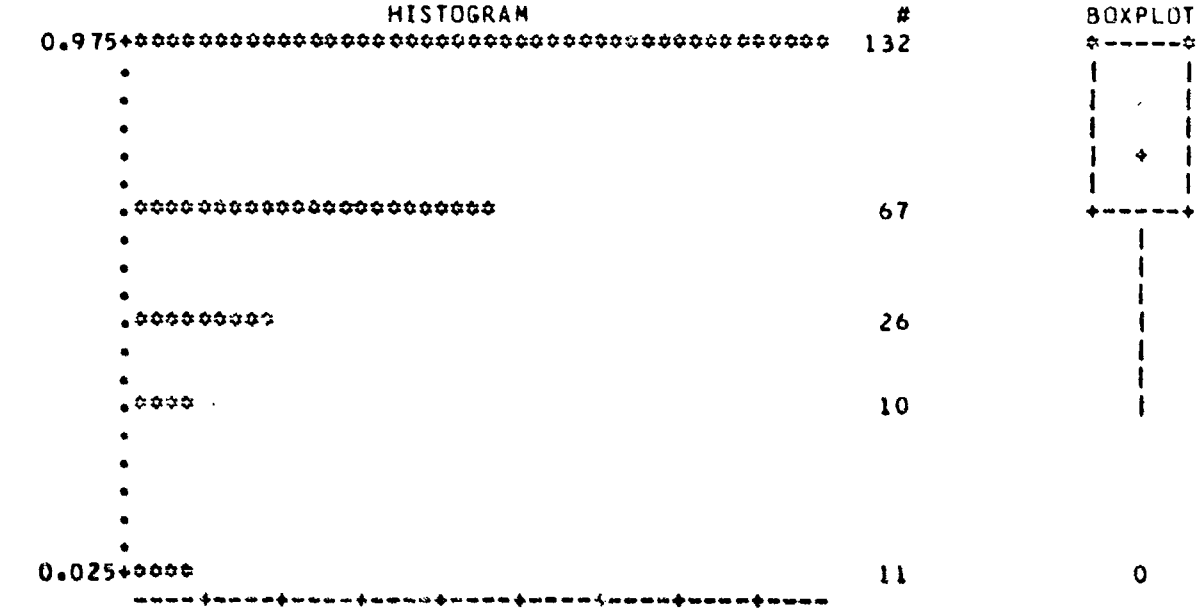
USAF/SCEEE LARGE-SCALE CT? STUDY

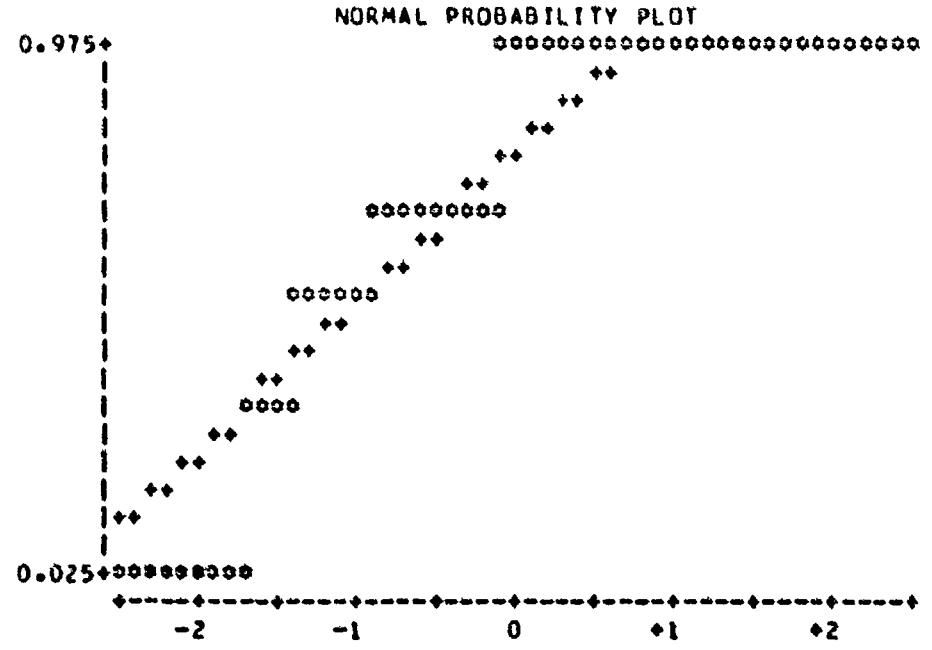
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMPC





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMFA

MOMENTS

N	246	SUM WGTS	246
MEAN	0.878049	SUM	216
STD DEV	1.24923	VARIANCE	1.56058
SKEWNESS	2.41125	KURTOSIS	8.95295
USS	572	CSS	382.341
CV	142.273	STD MEAN	0.079648
T:MEAN=0	11.0241	PROB>|T|	0.0001
SGN RANK	3875	PROB>|S|	0.0001
NUM ¬= 0	124		
D:NORMAL	0.265995	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	9	99%	6
75% Q3	1	95%	3
50% MED	1	90%	2.3
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	9		
Q3-Q1	1		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	150)	4(	147)
0(	150)	5(	13)
0(	148)	6(	59)
0(	147)	6(	138)
0(	146)	9(	24)

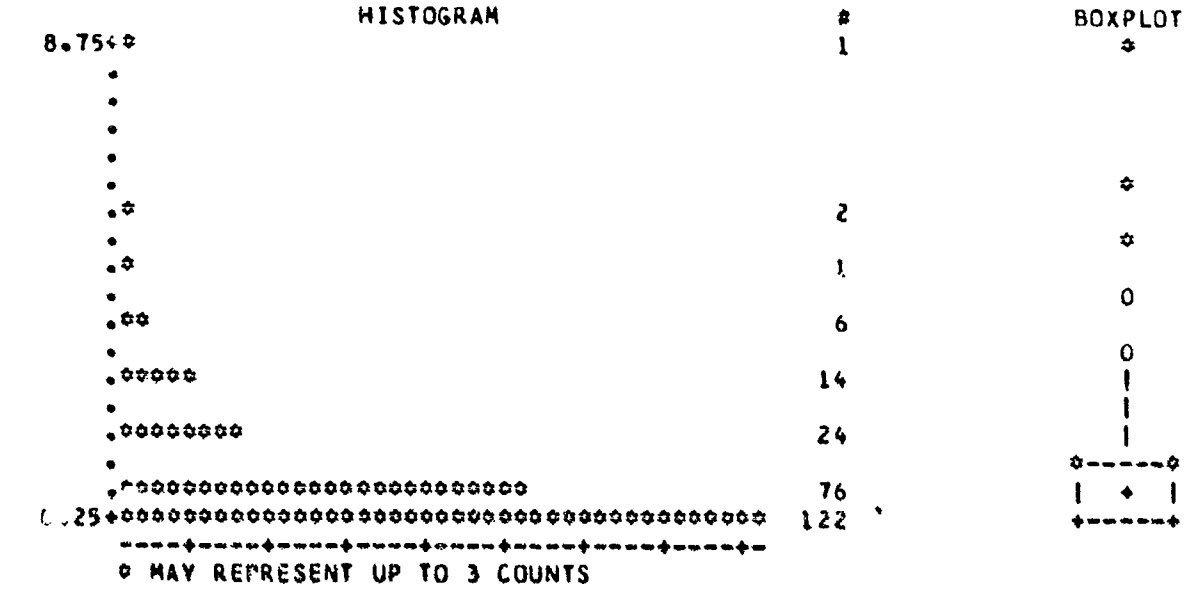
USAF/SCEEE LARGE-SCALE CTS STUDY

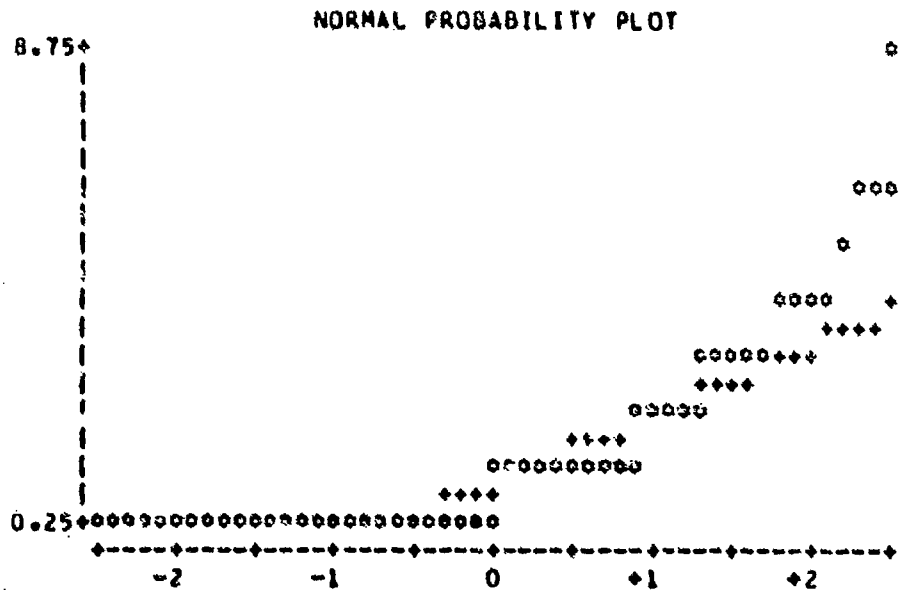
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMFA





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMRT

MOMENTS

N	168	SUM WGTS	168
MEAN	17.7794	SUM	2986.93
STD DEV	8.28754	VARIANCE	68.6833
SKEWNESS	0.217647	KURTOSIS	-0.854906
USS	64575.9	CSS	11470.1
CV	46.6132	STD MEAN	0.639398
T:MEAN=0	27.8064	PROB>|T|	0.0001
SGN RANK	7098	PROB>|S|	0.0001
NUM ¬= 0	168		
D:NORMAL	0.0712179	PROB>D	0.037

QUANTILES(DEF=4)

100% MAX	33.5	99%	33.224
75% Q3	24.45	95%	31.7
50% MED	16.925	90%	30.54
25% Q1	11.825	10%	7.24
0% MIN	1.5	5%	4.645
		1%	1.983
RANGE	32		
Q3-Q1	12.625		
MODE	10.2		

EXTREMES

LOWEST	ID	HIGHEST	ID
1.5(	64)	32.8(	79)
2.2(	41)	32.8(	116)
3(	49)	33(	69)
3.4(	38)	33.1(	91)
3.6(	88)	33.5(	33)

MISSING VALUE	.
COUNT	78
% COUNT/NOBS	31.71

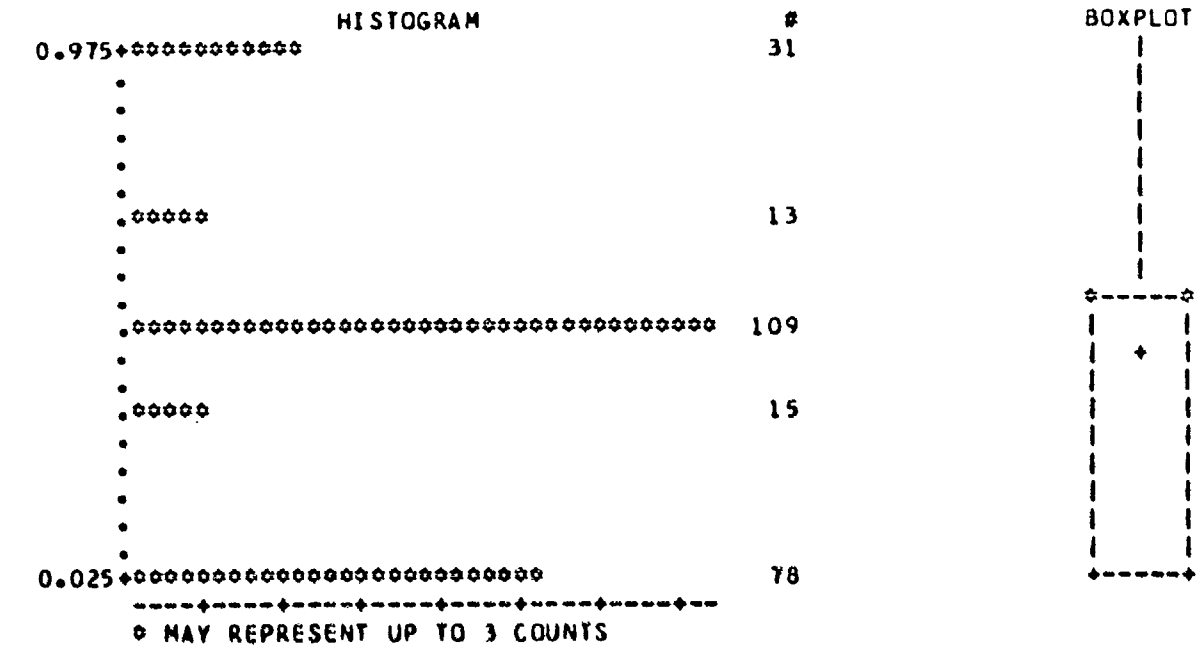
USAF/SCEEE LARGE-SCALE CTS STUDY

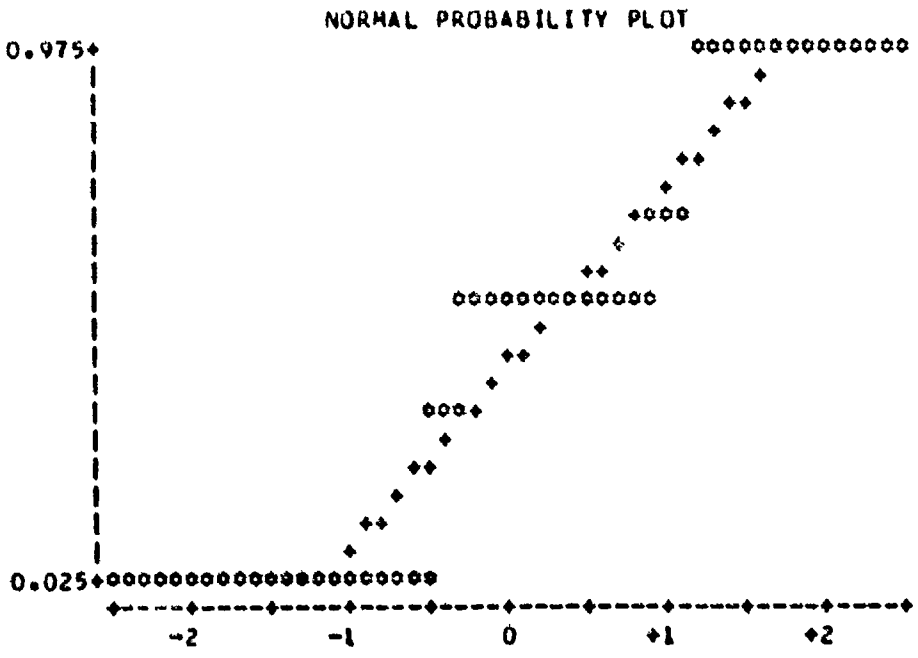
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMPC





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

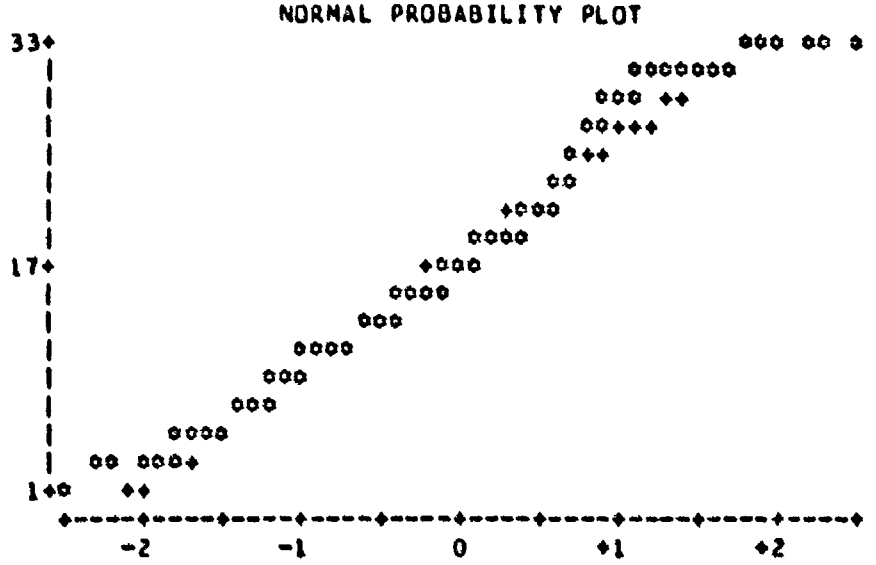
LEVEL=HIGH

UNIVARIATE

VARIABLE=PMRT

STEM	LEAF	#	BOXPLOT
32	2788015	7	
30	002255900036777	15	
28	02356891	8	
26	01180158	8	
24	7808	4	
22	139237	6	
20	112233453346	12	
18	1123578890234699	16	
16	12255712235669	14	
14	01113457770114568889	19	
12	0012345880144677	16	
10	122234466778893 89	17	
8	1246798	7	
6	0127378	7	
4	267723	6	
2	20468	5	
0	5	1	

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMPC

MOMENTS

N	246	SUM WGTS	246
MEAN	0.403117	SUM	99.1667
STD DEV	0.323997	VARIANCE	0.104974
SKEWNESS	0.219552	KURTOSIS	-0.734095
USS	65.6944	CSS	25.7187
CV	80.3732	STD MEAN	0.0206573
T:MEAN=0	19.5145	PROB>|T|	0.0001
SGN RANK	7098	PROB>|S|	0.0001
NUM ¬= 0	168		
D:NORMAL	0.239491	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.5	95%	1
50% MED	0.5	90%	1
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	1		
Q3-Q1	0.5		
MODE	0.5		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	150)	1(	115)
0(	150)	1(	122)
0(	145)	1(	133)
0(	144)	1(	135)
0(	142)	1(	135)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMFA

MOMENTS

N	246	SUM WGTS	246
MEAN	1.60163	SUM	394
STD DEV	1.49142	VARIANCE	2.22432
SKEWNESS	1.68807	KURTOSIS	5.37942
USS	1176	CSS	544.959
CV	93.1189	STD MEAN	0.0950893
T:MEAN=0	16.8434	PROB>|T|	0.0001
SGN RANK	8789	PROB>|S|	0.0001
NUM ¬= 0	187		
D:NORMAL	0.197321	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	10	99%	7.53
75% Q3	2	95%	4
50% MED	1	90%	3.3
25% Q1	1	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	10		
Q3-Q1	1		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	150)	6(	65)
0(	146)	7(	59)
0(	141)	7(	65)
0(	135)	8(	24)
0(	133)	10(	24)

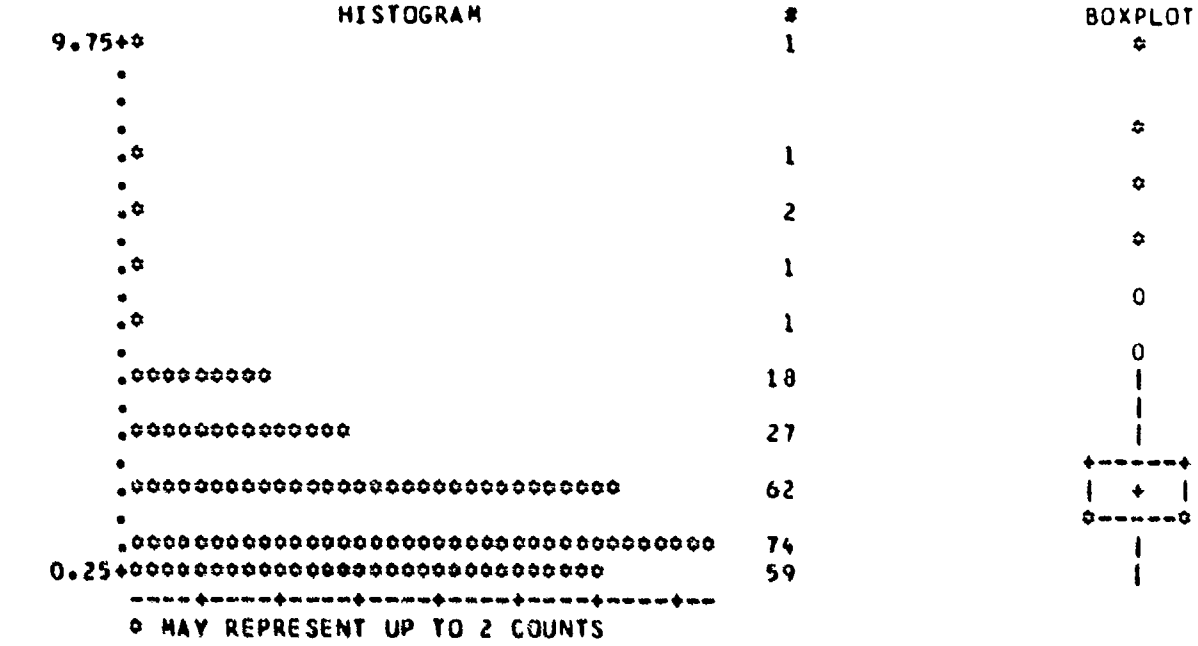
USAF/SCEEE LARGE-SCALE CTS STUDY

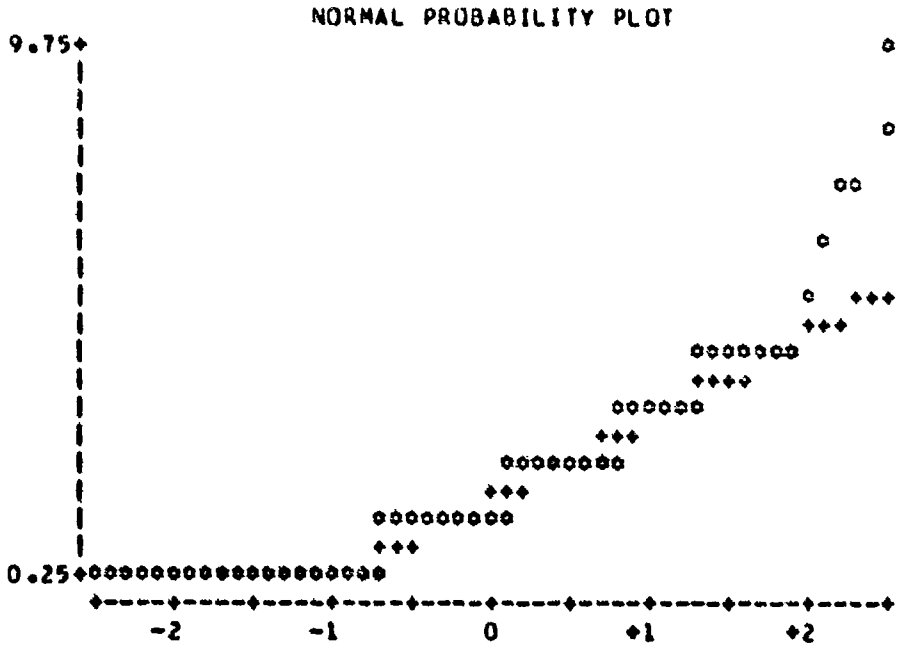
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMFA





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PHRT

MOMENTS

N	123	SUM WGTS	123
MEAN	8.5688	SUM	1053.96
STD DEV	3.24182	VARIANCE	10.5094
SKEWNESS	1.31423	KURTOSIS	2.2107
USS	10313.3	CSS	1282.15
CV	37.8328	STD MEAN	0.292305
T:MEAN=0	29.3146	PROB>|T|	0.0001
SGN RANK	3813	PROB>|S|	0.0001
NUM ¬= 0	123		
D:NORMAL	0.100207	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	20.3833	99%	20.3573
75% Q3	9.9375	95%	15.7489
50% MED	7.9625	90%	12.7889
25% Q1	6.27778	10%	5.18667
0% MIN	3.94444	5%	4.4
		1%	3.94978
RANGE	16.4389		
Q3-Q1	3.65972		
MODE	7		

EXTREMES

LOWEST	ID	HIGHEST	ID
3.94444(	24)	16.0889(	3)
3.96667(	63)	16.8375(	72)
4.03333(	11)	17.9667(	91)
4.2125(	74)	20.275(	138)
4.32222(	87)	20.3833(	124)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

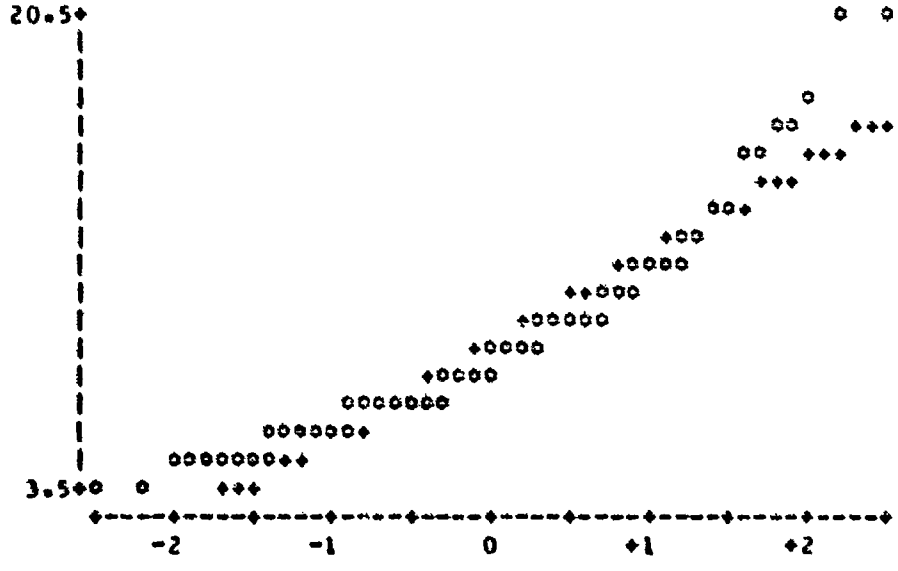
LEVEL=LOW

UNIVARIATE

VARIABLE=PMRT

STEM	LEAF	#	BOXPLOT
20	34	2	0
19			
18	0	1	
17			0
16	18	2	0
15	19	2	0
14			|
13	2379	4	|
12	569	3	|
11	0113468888	10	|
10	123469	6	|
9	00112334445778999	17	+------+
8	01222223566677	15	| + |
7	00000111233778999	18	o------o
6	000111223344455566699	21	+------+
5	0122234467777	13	|
4	00233679	8	|
3	9	1	|

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMPC

MOMENTS

N	123	SUM WGTS	123
MEAN	0.981352	SUM	120.706
STD DEV	0.061733	VARIANCE	0.00381096
SKEWNESS	-4.33385	KURTOSIS	21.8235
USS	118.92	CSS	0.464937
CV	6.2906	STD MEAN	0.00556628
T:MEAN=0	176.303	PROB>|T|	0.0001
SGN RANK	3813	PROB>|S|	0.0001
NUM ^= 0	123		
D:NORMAL	0.504879	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	1	95%	1
50% MED	1	90%	1
25% Q1	1	10%	0.868889
0% MIN	0.571429	5%	0.877778
		1%	0.594286
RANGE	0.428571		
Q3-Q1	0		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.571429(	138)	1(	145)
0.666667(	91)	1(	146)
0.75(	124)	1(	147)
0.857143(	89)	1(	148)
0.875(	110)	1(	150)

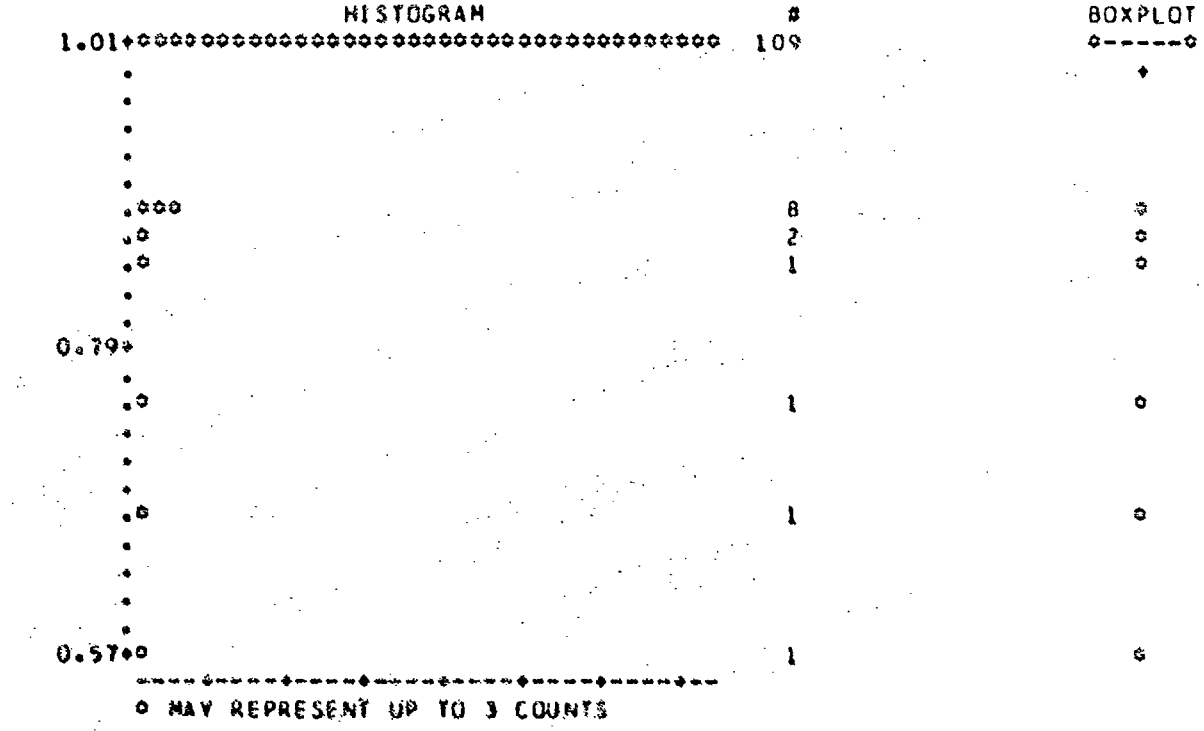
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMPC



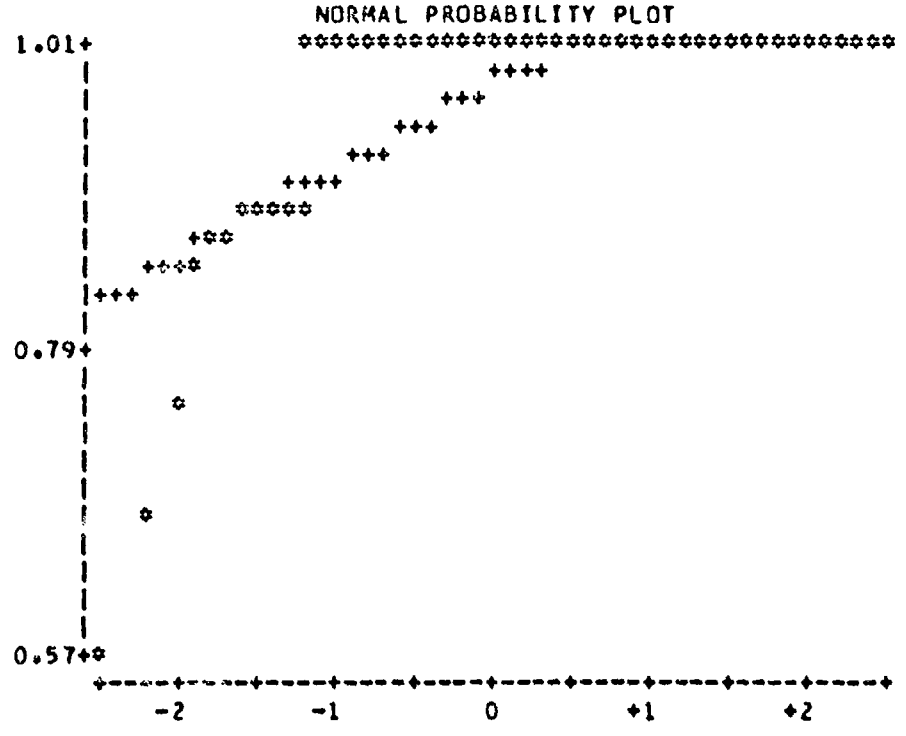
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMPC



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMFA

MOMENTS

N	123	SUM WGTS	123
MEAN	0.357724	SUM	44
STD DEV	0.593177	VARIANCE	0.351859
SKEWNESS	2.43394	KURTOSIS	6.25987
USS	58.6667	CSS	42.9268
CV	165.82	STD MEAN	0.053485
T:MEAN=0	6.6883	PROB>|T|	0.0001
SGN RANK	826.5	PROB>|S|	0.0001
NUM ¬= 0	57		
D:NORMAL	0.280627	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	3	99%	2.92
75% Q3	0.333333	95%	2
50% MED	0	90%	1
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	3		
Q3-Q1	0.333333		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	148)	2(	74)
0(	146)	2.33333(	11)
0(	142)	2.33333(	138)
0(	141)	2.66667(	24)
0(	140)	3(	23)

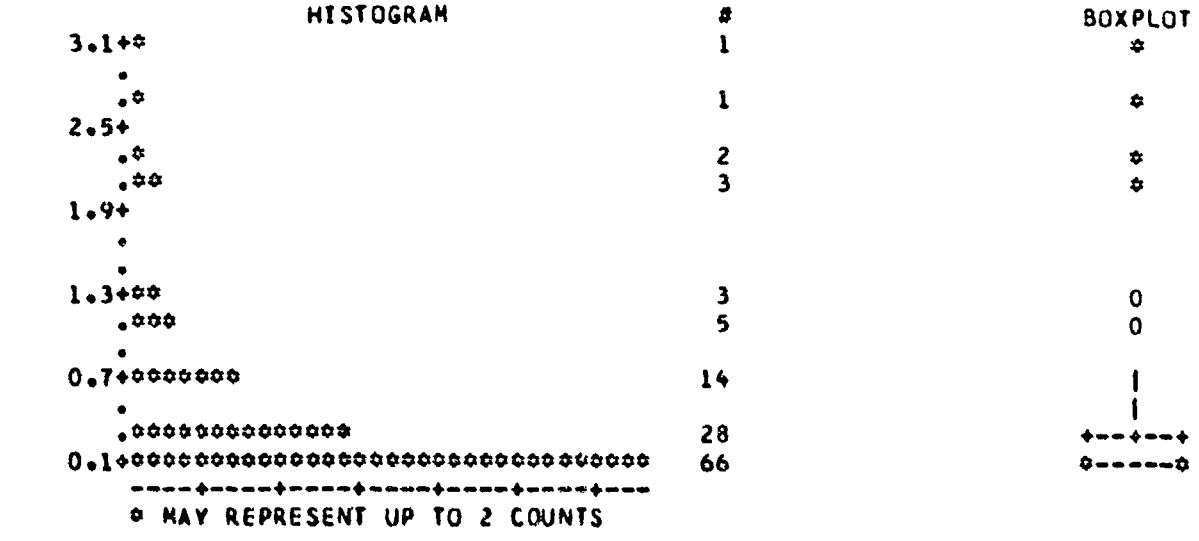
USAF/SCEEE LARGE-SCALE CTS STUDY

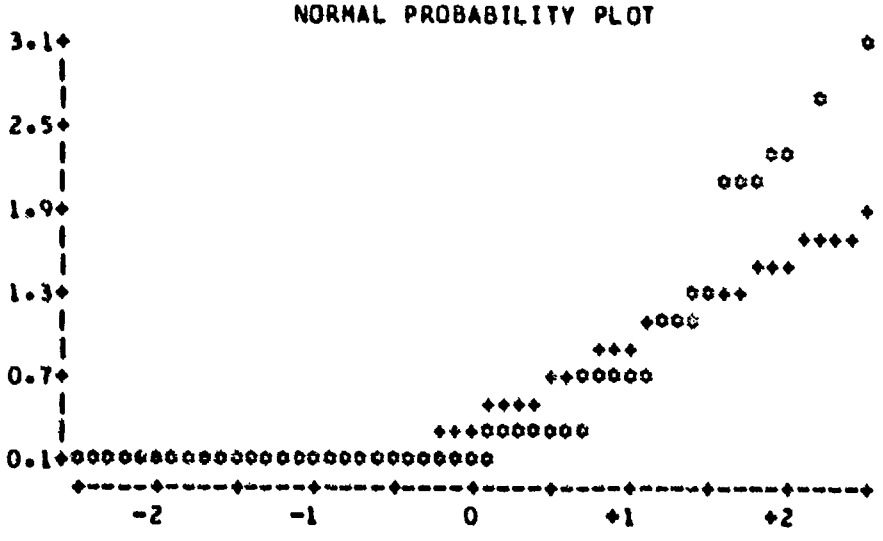
UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=LOW

UNIVARIATE

VARIABLE=PMFA





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMRT

MOMENTS

N	123	SUM WGTS	123
MEAN	16.1425	SUM	1985.53
STD DEV	3.48709	VARIANCE	12.1598
SKEWNESS	0.265221	KURTOSIS	-.00926742
USS	33535	CSS	1483.49
CV	21.6018	STD MEAN	0.31442
T:MEAN=0	51.3407	PROB>|T|	0.0001
SGN RANK	3813	PROB>|S|	0.0001
NUM ¬= 0	123		
D:NORMAL	0.0688884	PROB>D	>.15

QUANTILES(DEF=4)

100% MAX	26.82	99%	26.1632
75% Q3	18.5333	95%	22.1286
50% MED	15.9833	90%	20.46
25% Q1	13.7857	10%	11.4833
0% MIN	8.38571	5%	10.7029
		1%	8.39514
RANGE	18.4343		
Q3-Q1	4.74761		
MODE	11.6333		

EXTREMES

LOWEST	ID	HIGHEST	ID
8.38571(	13)	22.4333(	128)
8.425(	108)	23.3833(	64)
10.15(	30)	23.5714(	140)
10.3667(	23)	24.0833(	66)
10.5143(	94)	26.82(	80)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

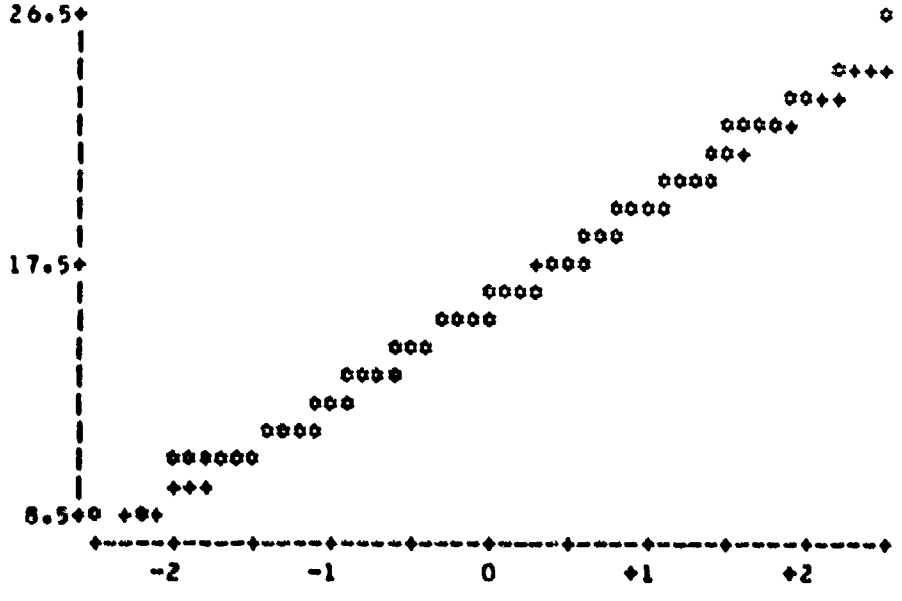
LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMRT

STEM	LEAF	#	BOXPLOT
26	8	1	0
25			
24	1	1	
23	46	2	
22	0014	4	
21	28	2	
20	2333458	7	
19	035567788	9	
18	0223556789	10	
17	112477899	9	
16	000011111155777999	17	
15	01111223335677779	16	
14	01134678899999	13	
13	0011446789	10	
12	23778	5	
11	12466799	8	
10	1457899	7	
9			
8	44	2	

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMPC

MOMENTS

N	123	SUM WGTS	123
MEAN	0.797038	SUM	98.0357
STD DEV	0.161678	VARIANCE	0.0261396
SKEWNESS	-0.713429	KURTOSIS	0.0417981
USS	81.3273	CSS	3.18903
CV	20.2848	STD MEAN	0.014578
T:MEAN=0	54.6742	PROB>|T|	0.0001
SGN RANK	3813	PROB>|S|	0.0001
NUM ¬= 0	123		
D:NORMAL	0.173418	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.888889	95%	1
50% MED	0.857143	90%	1
25% Q1	0.666667	10%	0.555556
0% MIN	0.285714	5%	0.5
		1%	0.307143
RANGE	0.714286		
Q3-Q1	0.222222		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.285714(	88)	1(	119)
0.375(	56)	1(	128)
0.428571(	138)	1(	134)
0.428571(	124)	1(	135)
0.5(	132)	1(	140)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

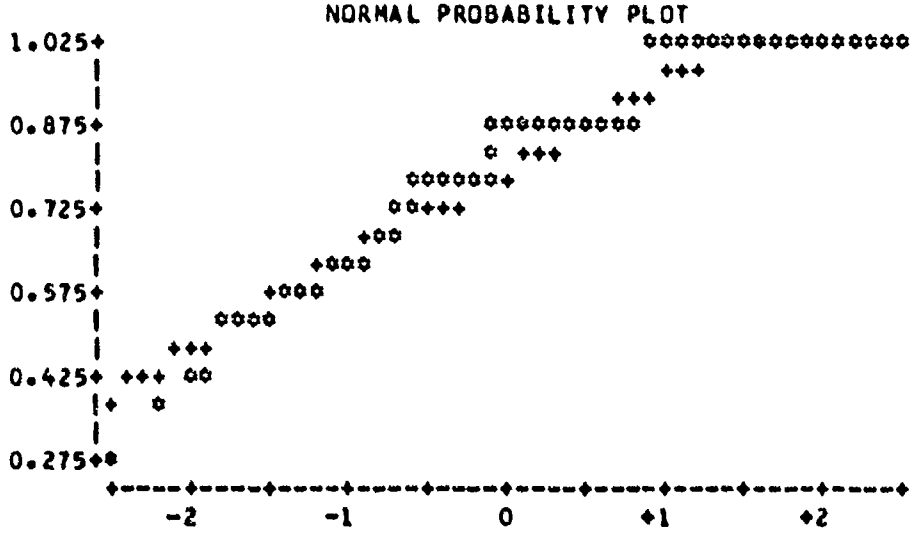
LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMPC

```
STEM LEAF                                                    #    BOXPLOT
  10 000000000000000000000000                               24        |
   9                                                                   |
   9                                                                   |
   8 6666667777777777777777777779999999999999               41        *------*
   8 3                                                       1        |      |
   7 555555555555588888888                                  22        |  +   |
   7 1111                                                    4        |      |
   6 7777777                                                 7        *------*
   6 222222222                                               9               |
   5 666677                                                  6               |
   5 00000                                                   5               |
   4                                                                         |
   4 33                                                      2               |
   3 7                                                       1               |
   3                                                                         |
   2 9                                                       1               0
     ----+----+----+----+----+----+----+----+----+----+-
  MULTIPLY STEM.LEAF BY 10**-01
```

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMFA

MOMENTS

N	123	SUM WGTS	123
MEAN	0.937669	SUM	115.333
STD DEV	1.05526	VARIANCE	1.11357
SKEWNESS	2.00368	KURTOSIS	4.52788
USS	244	CSS	135.855
CV	112.541	STD MEAN	0.0951494
T:MEAN=0	9.85471	PROB>|T|	0.0001
SGN RANK	2475	PROB>|S|	0.0001
NUM ¬= 0	99		
D:NORMAL	0.224417	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	5.66667	99%	5.34667
75% Q3	1.33333	95%	3.66667
50% MED	0.666667	90%	2
25% Q1	0.333333	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	5.66667		
Q3-Q1	1		
MODE	0.333333		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	146)	4(	11)
0(	142)	4(	59)
0(	140)	4(	138)
0(	134)	4.33333(	4)
0(	133)	5.66667(	24)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

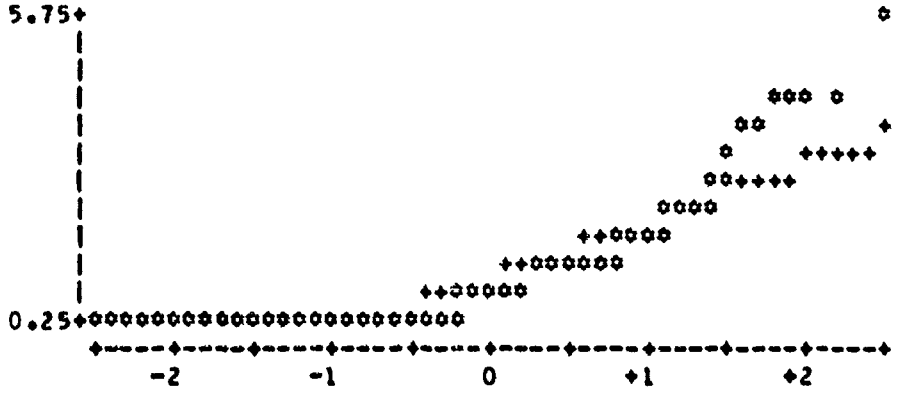
LEVEL=MEDIUM

UNIVARIATE

VARIABLE=PMFA

```
            HISTOGRAM                #                BOXPLOT
 5.75+*                              1                    *
     .                                                    |
     .                                                    |
     .*                              1                    0
     .***                            5                    0
     .*                              1                    0
     .*                              2                    |
     .*                              1                    |
     .*******                       14                    |
     .***                            6                  +---+
     .**********************         39                  *-+-*
 0.25+******************************* 53                  +---+
     ----+----+----+----+----+--
     * MAY REPRESENT UP TO 2 COUNTS
```

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMRT

MOMENTS

N	120	SUM WGTS	120
MEAN	17.475	SUM	2097
STD DEV	6.77151	VARIANCE	45.8534
SKEWNESS	0.0381627	KURTOSIS	-0.268147
USS	42101.7	CSS	5456.55
CV	38.7497	STD MEAN	0.618151
T:MEAN=0	28.2698	PROB>|T|	0.0001
SGN RANK	3630	PROB>|S|	0.0001
NUM ¬= 0	120		
D:NORMAL	0.0399864	PROB>D	>.15

QUANTILES(DEF=4)

100% MAX	33.5	99%	33.332
75% Q3	21.7512	95%	29.3875
50% MED	17.5167	90%	27.69
25% Q1	12.6125	10%	8.28333
0% MIN	1.5	5%	5.275
		1%	1.983
RANGE	32		
Q3-Q1	9.13874		
MODE	3.8		

EXTREMES

LOWEST	ID	HIGHEST	ID
1.5(	64)	30(	66)
3.8(	110)	30.2(	65)
3.8(	41)	30.2(	126)
4.4(	60)	32.7(	55)
4.6(	71)	33.5(	3)

MISSING VALUE	.
COUNT	3
% COUNT/NOBS	2.44

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

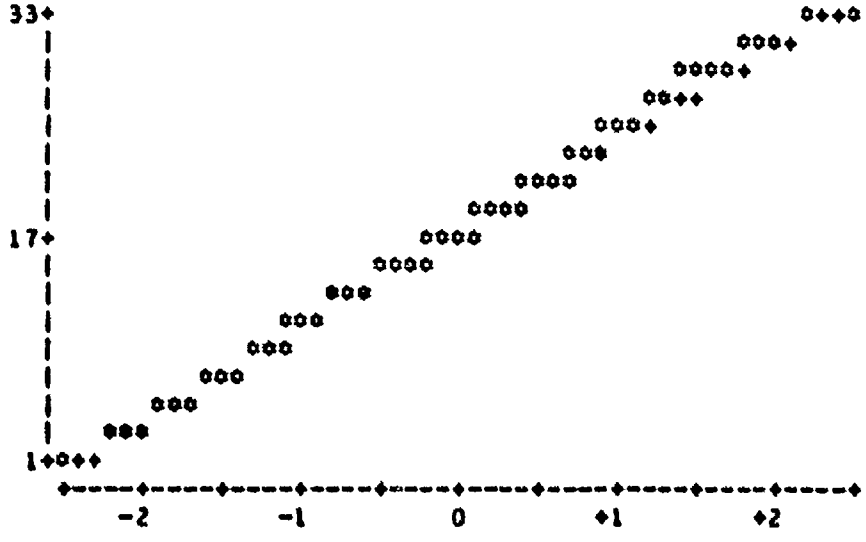
LEVEL=HIGH

UNIVARIATE

VARIABLE=PMRT

STEM	LEAF	#	BOXPLOT
32	75	2	
30	022	3	
28	133614	6	
26	0178	4	
24	124257	6	
22	0244573	7	
20	1245789012789	13	
18	011448990023349	15	
16	235788902255899	15	
14	45667823367889	14	
12	12224412468	11	
10	37890257	8	
8	34997	5	
6	77036	5	
4	462	3	
2	88	2	
0	5	1	

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMPC

MOMENTS

N	123	SUM WGTS	123
MEAN	0.401907	SUM	49.4345
STD DEV	0.198836	VARIANCE	0.0395358
SKEWNESS	0.32319	KURTOSIS	-0.421787
USS	24.6914	CSS	4.82337
CV	49.4732	STD MEAN	0.0179284
T:MEAN=0	22.4173	PROB>|T|	0.0001
SGN RANK	3630	PROB>|S|	0.0001
NUM ¬= 0	120		
D:NORMAL	0.13897	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	0.875	99%	0.870714
75% Q3	0.5	95%	0.809524
50% MED	0.333333	90%	0.666667
25% Q1	0.285714	10%	0.166667
0% MIN	0	5%	0.147619
		1%	0
RANGE	0.875		
Q3-Q1	0.214286		
MODE	0.166667		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	150)	0.833333(	52)
0(	44)	0.833333(	75)
0(	31)	0.833333(	135)
0.142857(	114)	0.857143(	23)
0.142857(	64)	0.875(	13)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

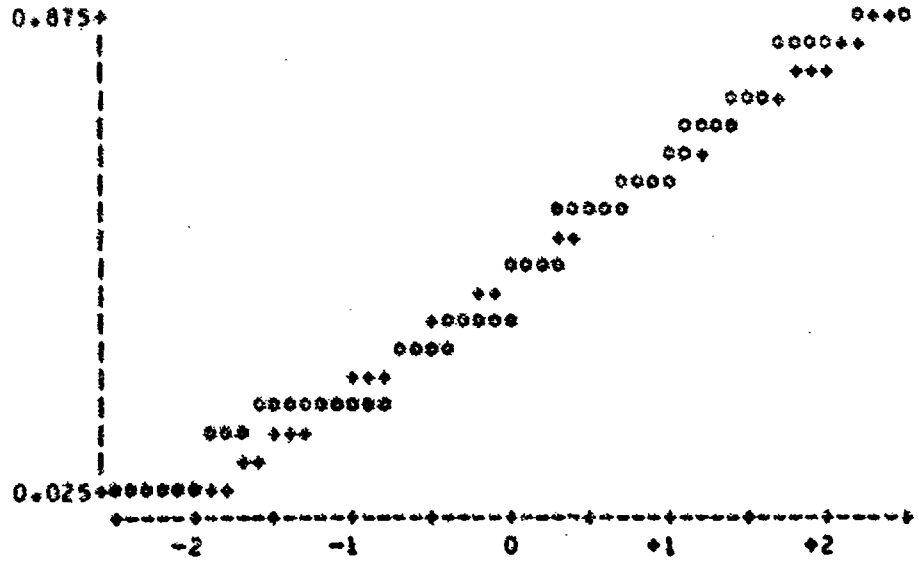
LEVEL=HIGH

UNIVARIATE

VARIABLE=PMPC

```
STEM LEAF                            #                    BOXPLOT
   8 67                              2                       0
   8 3333                            4                       0
   7                                                         |
   7 1111                            4                       |
   6 7777777                         7                       |
   6 22                              2                       |
   5 77777777777                    11                       |
   5 00000000000000000              17                   +------+
   4                                                     |      |
   4 33333333333333                 14                  |  +   |
   3                                                     |      |
   3 333333333333333333333          21                  *------*
   2 999999999999                   13                  +------+
   2                                                         |
   1 777777777777777777777          22                      |
   1 444                             3                      |
   0                                                        |
   0 000                             3                      |
     ----+----+----+----+----+--
  MULTIPLY STEM.LEAF BY 10**-01
```

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

LEVEL=HIGH

UNIVARIATE

VARIABLE=PMFA

MOMENTS

N	123	SUM WGTS	123
MEAN	1.71003	SUM	210.333
STD DEV	1.30988	VARIANCE	1.71577
SKEWNESS	1.82412	KURTOSIS	5.30597
USS	569	CSS	209.324
CV	76.5997	STD MEAN	0.118107
T:MEAN=0	14.4786	PROB>|T|	0.0001
SGN RANK	3630	PROB>|S|	0.0001
NUM ^= 0	120		
D:NORMAL	0.152238	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	8.33333	99%	7.61333
75% Q3	2.33333	95%	4.86667
50% MED	1.33333	90%	3.33333
25% Q1	0.666667	10%	0.333333
0% MIN	0	5%	0.333333
		1%	0
RANGE	8.33333		
Q3-Q1	1.66667		
MODE	0.666667		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	70)	5(	65)
0(	54)	5(	138)
0(	34)	5.33333(	23)
0.333333(	146)	5.33333(	59)
0.333333(	133)	8.33333(	24)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR PROBABILITY MONITORING - TRIALS 5,6,8

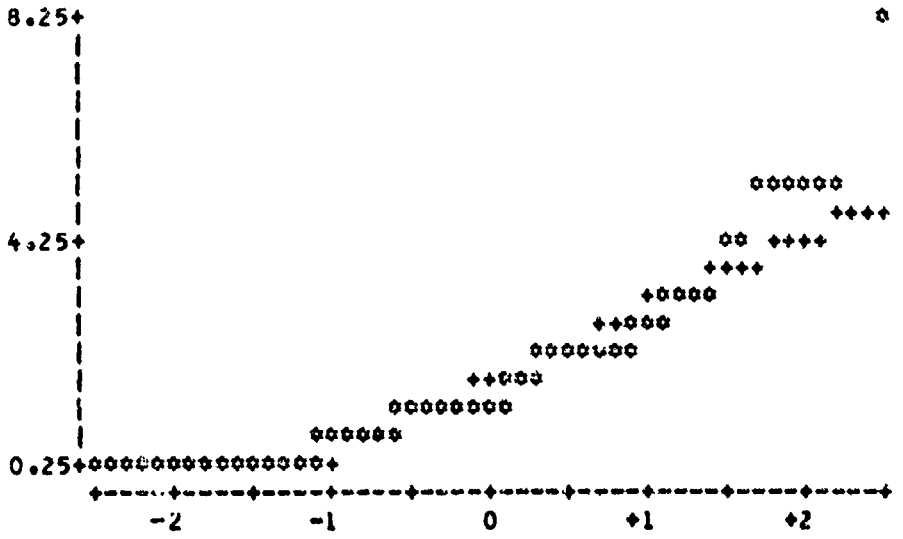
LEVEL=HIGH

UNIVARIATE

VARIABLE=PMFA

STEM	LEAF	#	BOXPLOT
8	3	1	*
7			
7			
6			
6			
5			
5	00033	5	0
4			
4	003	3	|
3			|
3	00003333	8	|
2	77777	5	|
2	00000000000000003333333333	26	+------+
1	7777777777	10	| + |
1	00000000000333333333333333333	30	*------*
0	77777777777777777777	19	+------+
0	0003333333333333	16	|

NORMAL PROBABILITY PLOT



Appendix A-8

Univariate Summaries - Spatial Processing

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=SPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	757.947	SUM	186455
STD DEV	251.937	VARIANCE	63472.1
SKEWNESS	1.48904	KURTOSIS	4.69882
USS	156873697	CSS	15550660
CV	33.2393	STD MEAN	16.0629
T:MEAN=0	47.1862	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.0948818	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	2141	99%	1774.77
75% Q3	899.5	95%	1211.1
50% MED	710	90%	1059.1
25% Q1	575.75	10%	485.9
0% MIN	360	5%	437
		1%	369.47
RANGE	1781		
Q3-Q1	323.75		
MODE	437		

EXTREMES

LOWEST	ID	HIGHEST	ID
360(	53)	1349(	25)
369(	133)	1409(	79)
370(	54)	1611(	147)
380(	133)	1920(	5)
383(	114)	2141(	17)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=LOW

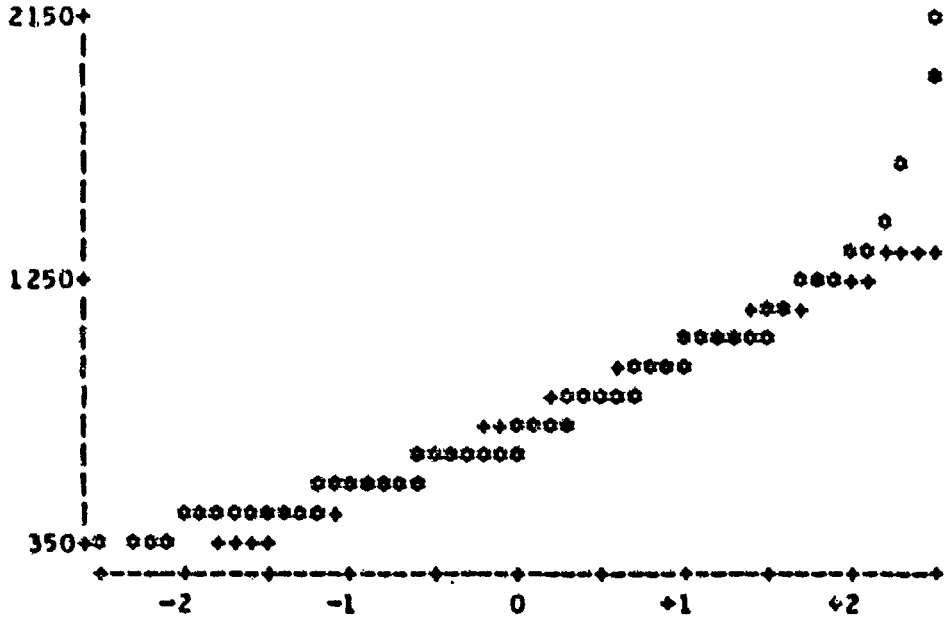
UNIVARIATE

VARIABLE=SPMNO

STEM	LEAF	#	BOXPLOT
21		1	*
20			
19		1	*
18			
17			
16		1	0
15			
14		1	0
13		2	|
12		6	|
11		5	|
10		22	|
9		22	|
8		32	+------+
7		34	*--+--*
6		47	| |
5		43	+------+
4		24	|
3		5	|

MULTIPLY STEM.LEAF BY 10**+02

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=SPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.947597	SUM	233.109
STD DEV	0.0530308	VARIANCE	0.00281226
SKEWNESS	-1.75355	KURTOSIS	4.78192
USS	221.582	CSS	0.689005
CV	5.59634	STD MEAN	0.00338112
T:MEAN=0	280.261	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.210347	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	1	95%	1
50% MED	0.961538	90%	1
25% Q1	0.923077	10%	0.883231
0% MIN	0.684211	5%	0.842154
		1%	0.728461
RANGE	0.315789		
Q3-Q1	0.0769231		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.684211(	36)	1(	141)
0.692308(	138)	1(	142)
0.769231(	64)	1(	144)
0.777778(	138)	1(	145)
0.777778(	134)	1(	145)

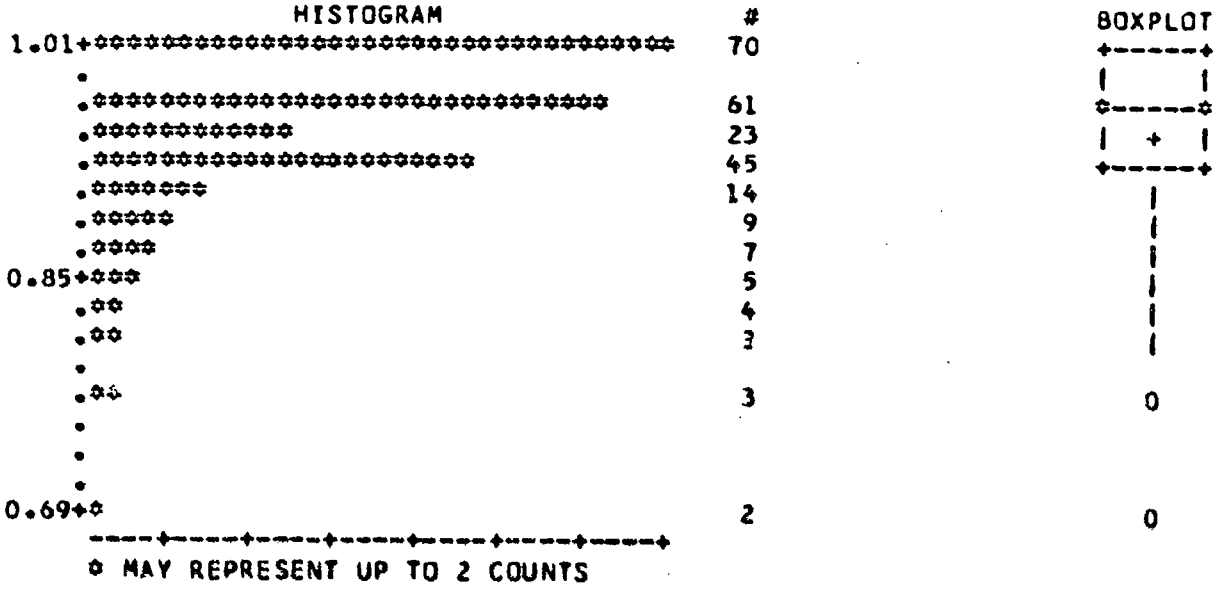
USAF/SCEEE LARGE-SCALE CTS STUDY

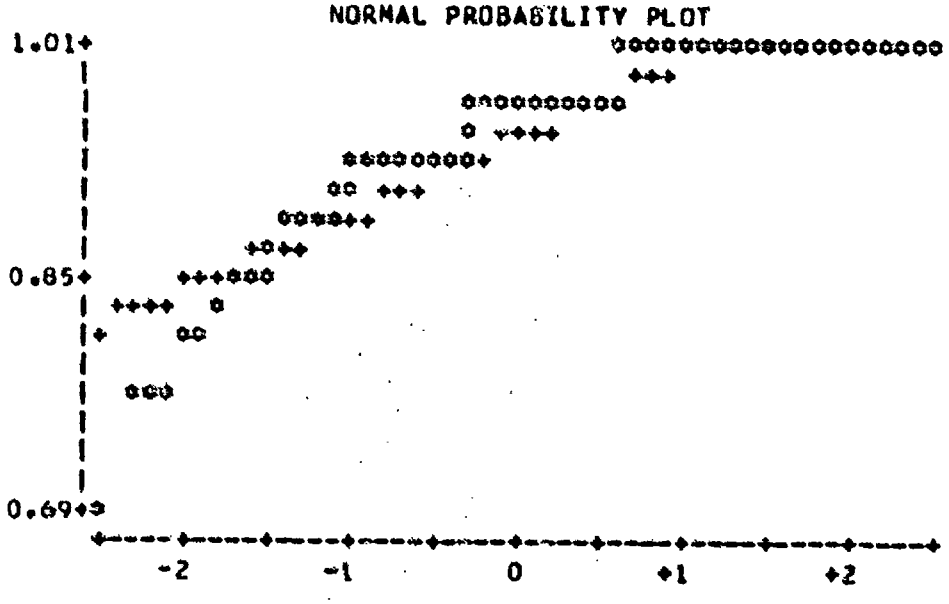
UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=LOW

UNIVARIATE

VARIABLE=SPPCO





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	1289.01	SUM	317096
STD DEV	397.468	VARIANCE	157980
SKEWNESS	0.716187	KURTOSIS	0.68686
USS	447444540	CSS	38705218
CV	30.8351	STD MEAN	25.3416
T:MEAN=0	50.8653	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.0615529	PROB>D	0.023

QUANTILES(DEF=4)

100% MAX	2652	99%	2556.05
75% Q3	1515.25	95%	1952.8
50% MED	1259.5	90%	1850
25% Q1	1007	10%	817.5
0% MIN	545	5%	717.75
		1%	567.4
RANGE	2107		
Q3-Q1	508.25		
MODE	1065		

EXTREMES

LOWEST	ID	HIGHEST	ID
545(	38)	2432(	88)
558(	114)	2476(	79)
578(	133)	2511(	22)
585(	127)	2596(	22)
606(	53)	2652(	36)

USAF/SCEEE LARGE-SCALE CYS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SPMNO

STEM	LEAF	#	BOXPLOT
26	05	2	0
25	1	1	0
24	38	2	0
23			
22	5	1	|
21	238	3	|
20			|
19	01224677	8	|
18	145555666889	12	|
17	233677899	9	|
16	1244678	7	|
15	1112233334455567899	19	+-----+
14	011122223334445556888899	24	| |
13	000111122233334455568899	23	| |
12	011122222223455666667899999999	29	*--+--*
11	00112223444556678899 9	21	| |
10	001111122333356666666888899	26	+-----+
9	112222234446667889	18	|
8	00123345566677888999	20	|
7	002223366789	12	|
6	14789	5	|
5	4688	4	|

MULTIPLY STEM.LEAF BY 10**+02

USAF/SCEEE LARGE-SCALE CTS STUDY

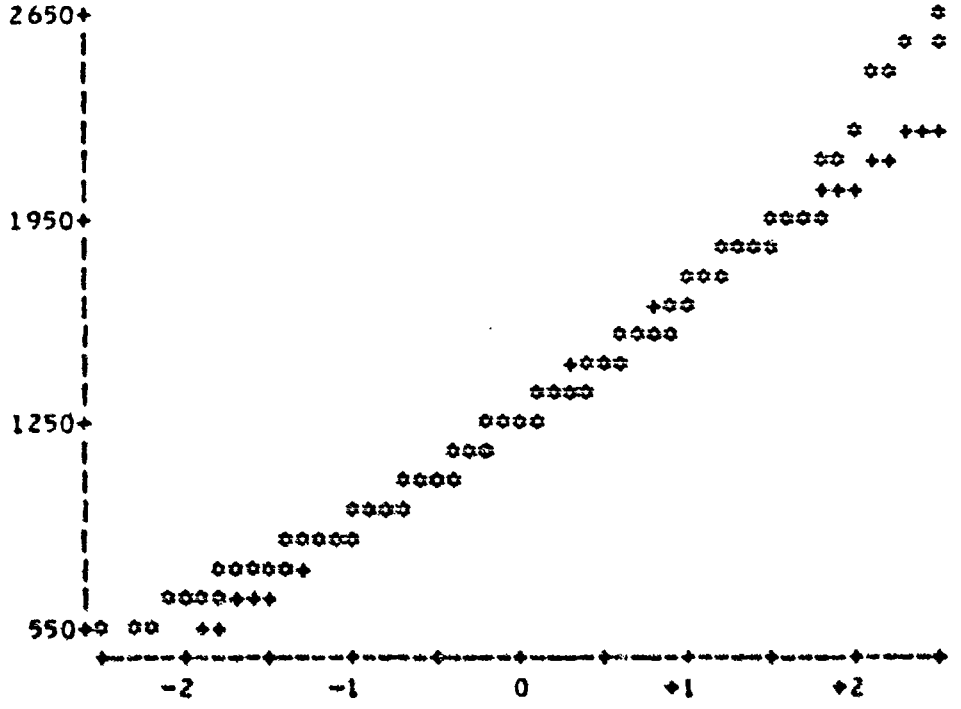
UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SPMNO

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.919421	SUM	226.177
STD DEV	0.0724118	VARIANCE	0.00524347
SKEWNESS	-1.26859	KURTOSIS	2.35978
USS	209.237	CSS	1.28465
CV	7.87581	STD MEAN	0.00461681
T:MEAN=0	199.146	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.165862	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.961538	95%	1
50% MED	0.92	90%	1
25% Q1	0.87875	10%	0.807692
0% MIN	0.56	5%	0.782609
		1%	0.693128
RANGE	0.44		
Q3-Q1	0.0827884		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.56(	124)	1(	128)
0.681818(	91)	1(	128)
0.705882(	36)	1(	131)
0.708333(	67)	1(	141)
0.730769(	65)	1(	141)

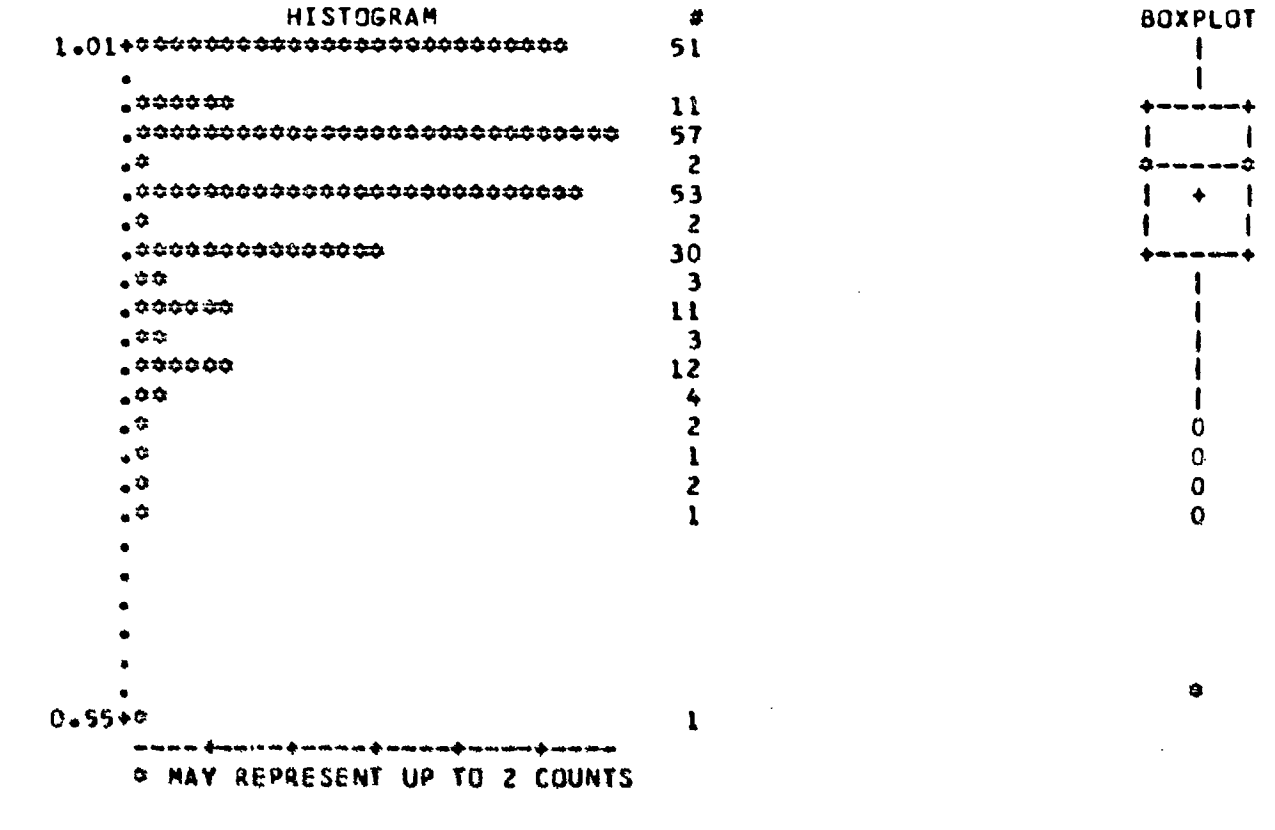
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SPPCO



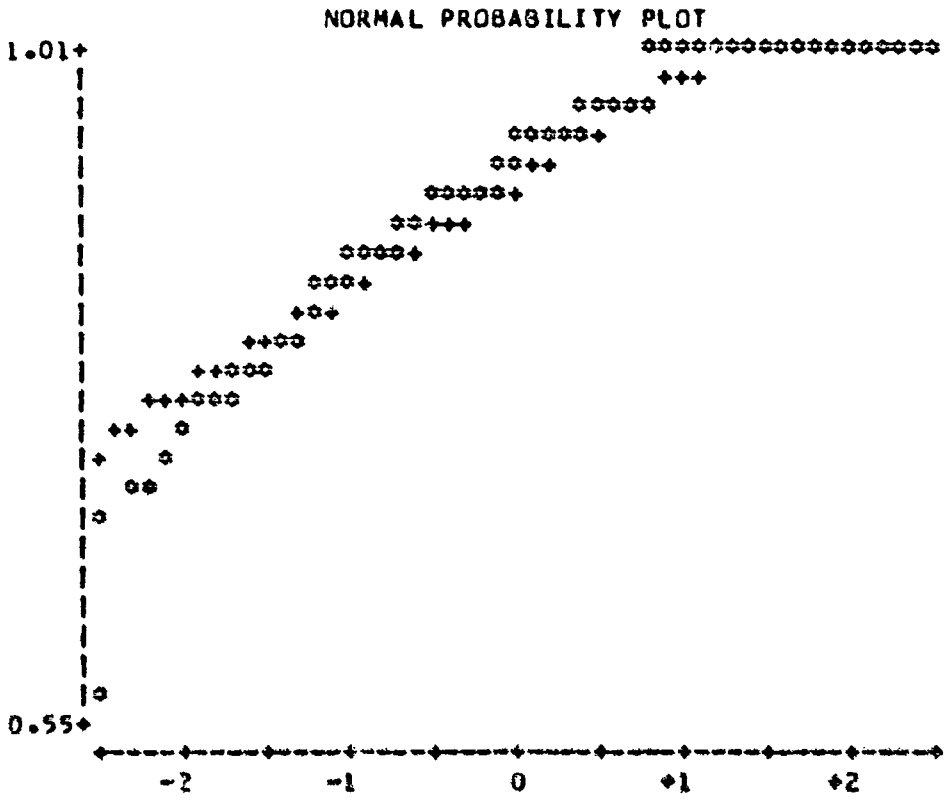
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SPPCO



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=SPMNO

MOMENTS

N	246	SUM WGTS	246
MEAN	1538.72	SUM	378524
STD DEV	509.56	VARIANCE	259652
SKEWNESS	0.380829	KURTOSIS	-0.253946
USS	646055402	CSS	63614676
CV	33.116	STD MEAN	32.4884
T:MEAN=0	47.362	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ^= 0	246		
D:NORMAL	0.0505322	PROB>D	0.127

QUANTILES(DEF=4)

100% MAX	2917	99%	2892.61
75% Q3	1855.5	95%	2456.3
50% MED	1509	90%	2240.2
25% Q1	1165	10%	860.7
0% MIN	564	5%	754.1
		1%	618.47
RANGE	2353		
Q3-Q1	690.5		
MODE	724		

EXTREMES

LOWEST	ID	HIGHEST	ID
564(	133)	2760(	19)
618(	114)	2774(	22)
619(	127)	2873(	2)
646(	114)	2910(	76)
676(	38)	2917(	60)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=SPMNO

STEM	LEAF	#	BOXPLOT
29	12	2	0
28	7	1	|
27	67	2	|
26	0455	4	|
25	19	2	|
24	056	3	|
23	0023489	7	|
22	01133678	8	|
21	266666	6	|
20	1222577	7	|
19	111223358889	12	|
18	001122355555556678899	21	+-----+
17	00222335566679999	17	| |
16	001112224466799	15	| |
15	011122345556677799	18	*--+--*
14	0000011223344555589	19	| |
13	001122246777778889999	20	| |
12	01222244444567889	17	| |
11	011334455677899	14	+-----+
10	00236777789	11	|
9	33335567778	11	|
8	1333445667889	13	|
7	0122356778	10	|
6	22589	5	|
5	6	1	|

MULTIPLY STEM.LEAF BY 10**+02

USAF/SCEEE LARGE-SCALE CTS STUDY

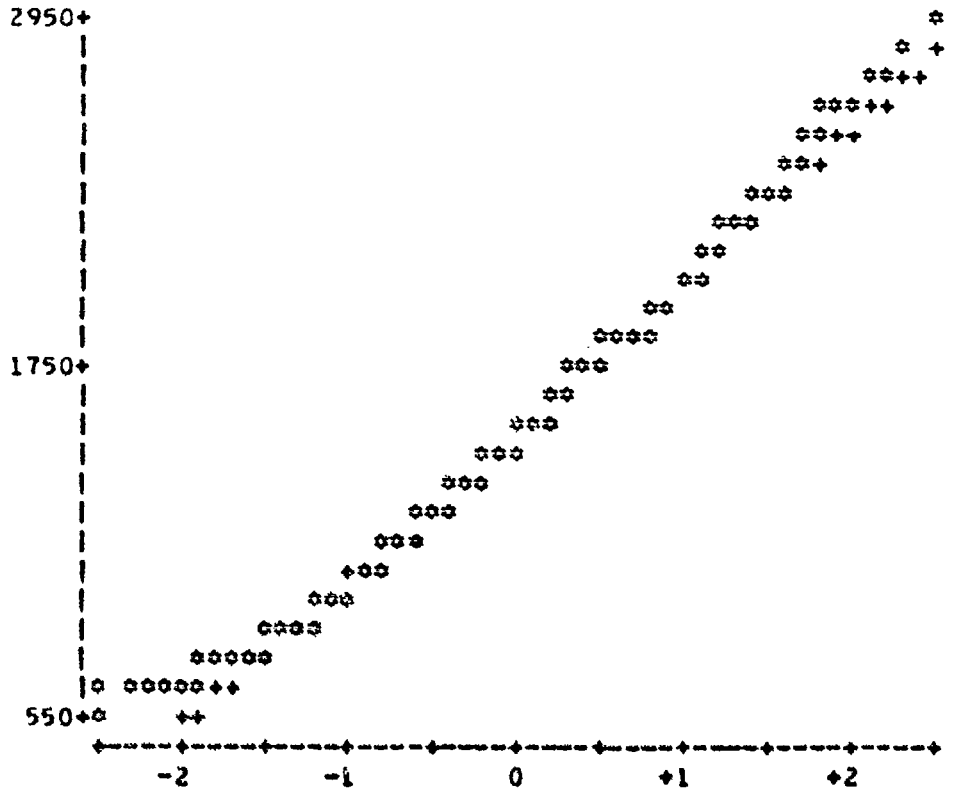
UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=SPMNO

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=SPPCO

MOMENTS

N	246	SUM WGTS	246
MEAN	0.895345	SUM	220.255
STD DEV	0.0868855	VARIANCE	0.00754908
SKEWNESS	-1.62799	KURTOSIS	4.91185
USS	199.054	CSS	1.84953
CV	9.70413	STD MEAN	0.00553961
T:MEAN=0	161.626	PROB>|T|	0.0001
SGN RANK	15190.5	PROB>|S|	0.0001
NUM ¬= 0	246		
D:NORMAL	0.142606	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1	99%	1
75% Q3	0.956522	95%	1
50% MED	0.913043	90%	1
25% Q1	0.85	10%	0.791667
0% MIN	0.4	5%	0.742935
		1%	0.583333
RANGE	0.6		
Q3-Q1	0.106522		
MODE	1		

EXTREMES

LOWEST	ID	HIGHEST	ID
0.4(	4)	1(	122)
0.583333(	55)	1(	129)
0.583333(	4)	1(	131)
0.6(	76)	1(	132)
0.652174(	141)	1(	135)

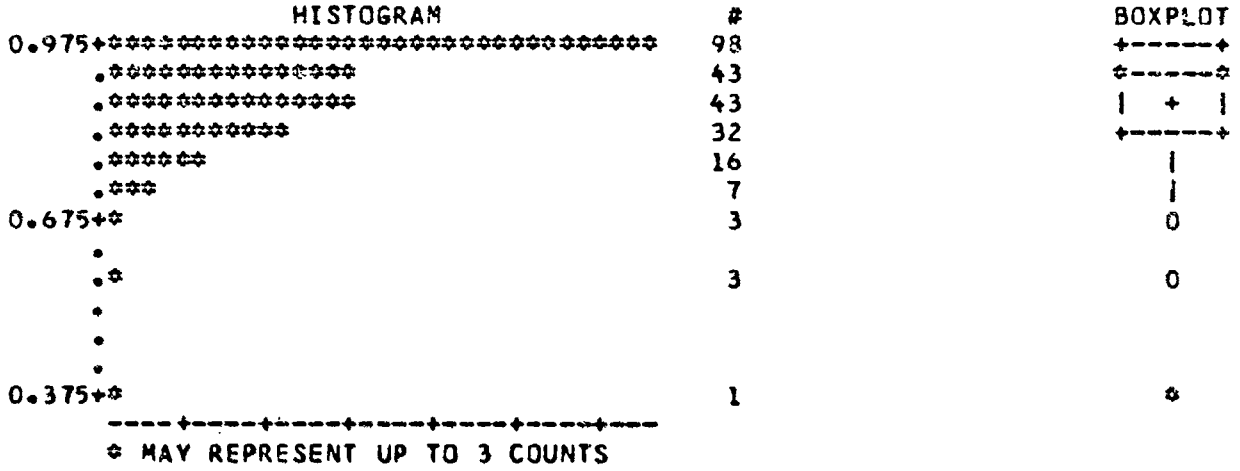
USAF/SCEEE LARGE-SCALE CTS STUDY

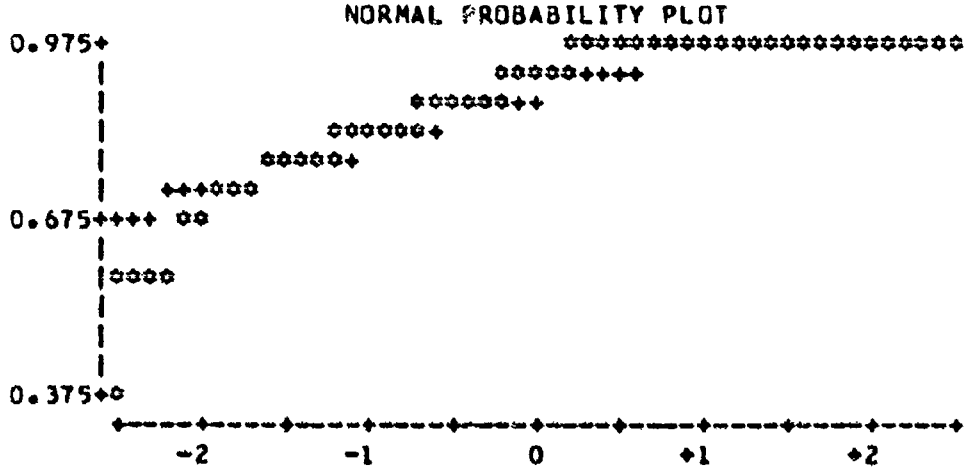
UNIVARIATE SUMMARY FOR SPATIAL PROCESSING

LEVEL=HIGH

UNIVARIATE

VARIABLE=SPPCO





Appendix A-9

Univariate Summaries - Unstable Tracking

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=LOW

UNIVARIATE

VARIABLE=UTMAE

MOMENTS

N	240	SUM WGTS	240
MEAN	10.1887	SUM	2445.3
STD DEV	9.1711	VARIANCE	84.1091
SKEWNESS	1.33809	KURTOSIS	0.694078
USS	45016.6	CSS	20102.1
CV	90.012	STD MEAN	0.591992
T:MEAN=0	17.211	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.183572	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	37	99%	36.285
75% Q3	12.55	95%	30.39
50% MED	6.45	90%	26.57
25% Q1	3.5	10%	2.4
0% MIN	1.4	5%	1.805
		1%	1.4
RANGE	35.6		
Q3-Q1	9.05		
MODE	2.8		

EXTREMES

LOWEST	ID	HIGHEST	ID
1.4(	142)	34.2(	17)
1.4(	114)	34.8(	7)
1.4(	114)	35.4(	21)
1.4(	11)	36.9(	66)
1.5(	129)	37(	74)

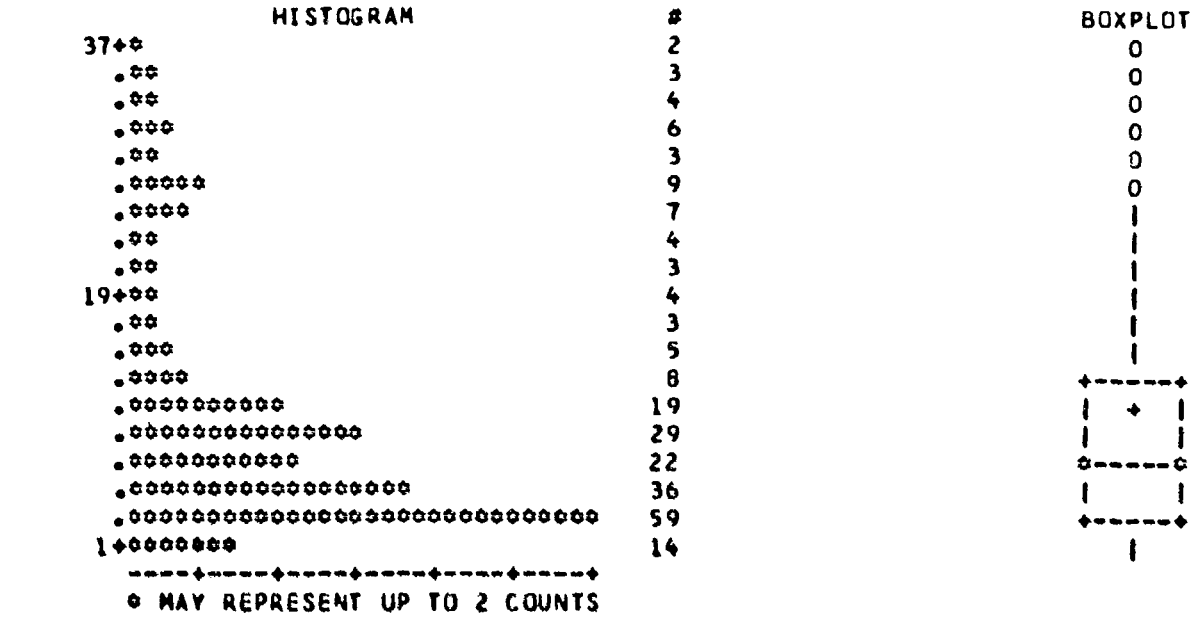
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

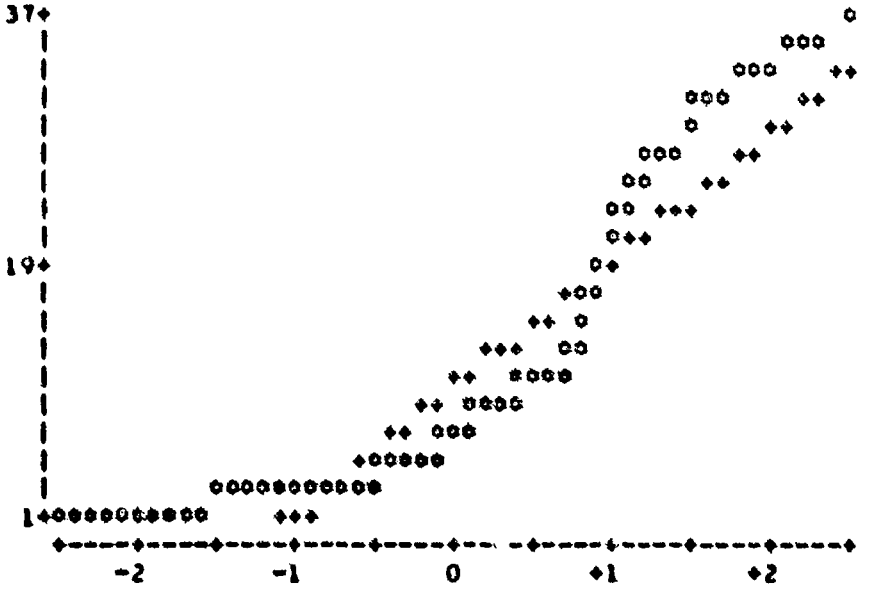
LEVEL=LOW

UNIVARIATE

VARIABLE=UTMAE



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=LOW

UNIVARIATE

VARIABLE=UTEV

MOMENTS

N	240	SUM WGTS	240
MEAN	6.41667	SUM	1540
STD DEV	16.7462	VARIANCE	280.437
SKEWNESS	3.90792	KURTOSIS	18.9787
USS	76906	CSS	67024.3
CV	260.98	STD MEAN	1.08097
T:MEAN=0	5.93605	PROB>|T|	0.0001
SGN RANK	1701.5	PROB>|S|	0.0001
NUM ¬= 0	82		
D:NORMAL	0.36651	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	133	99%	84.59
75% Q3	2	95%	44.65
50% MED	0	90%	24.9
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	133		
Q3-Q1	2		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	150)	61(	21)
0(	150)	77(	7)
0(	148)	84(	21)
0(	148)	85(	74)
0(	146)	133(	66)

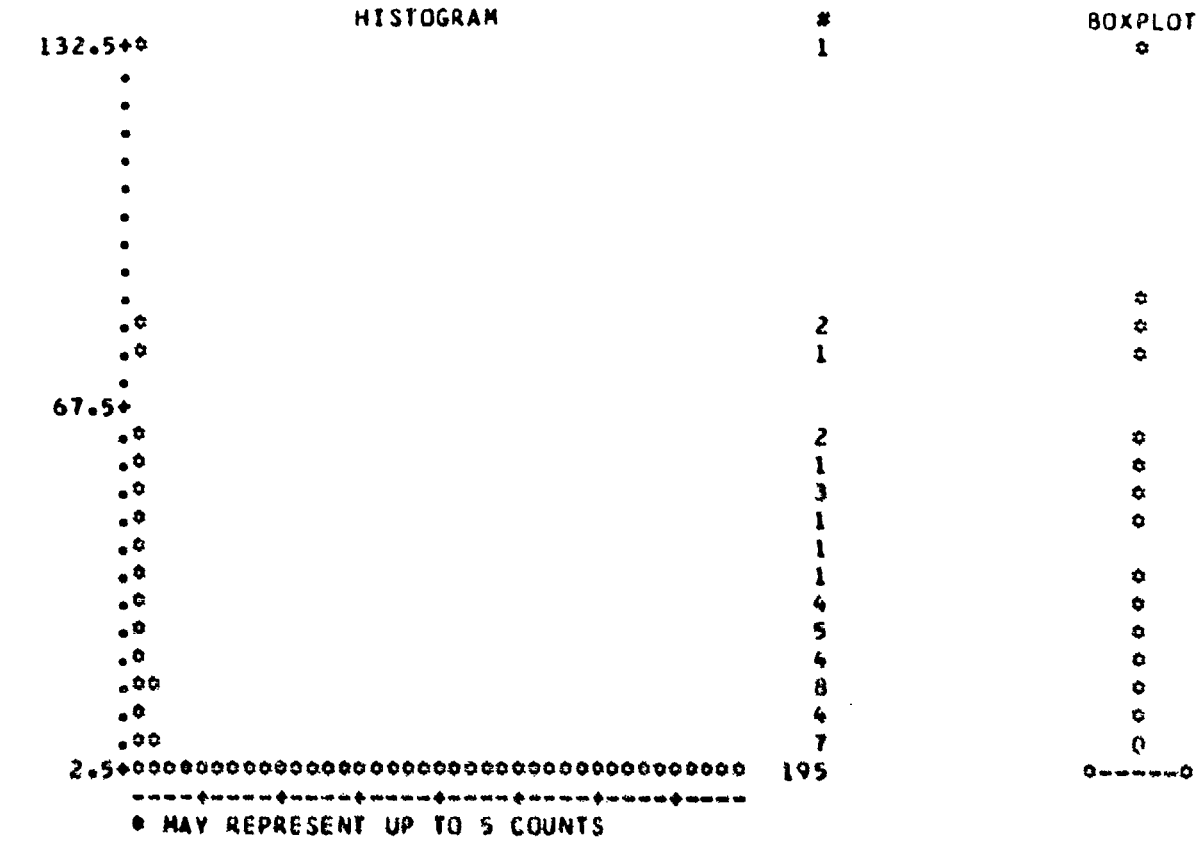
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=LOW

UNIVARIATE

VARIABLE=UTEV



USAF/SCEEE LARGE-SCALE CTS STUDY

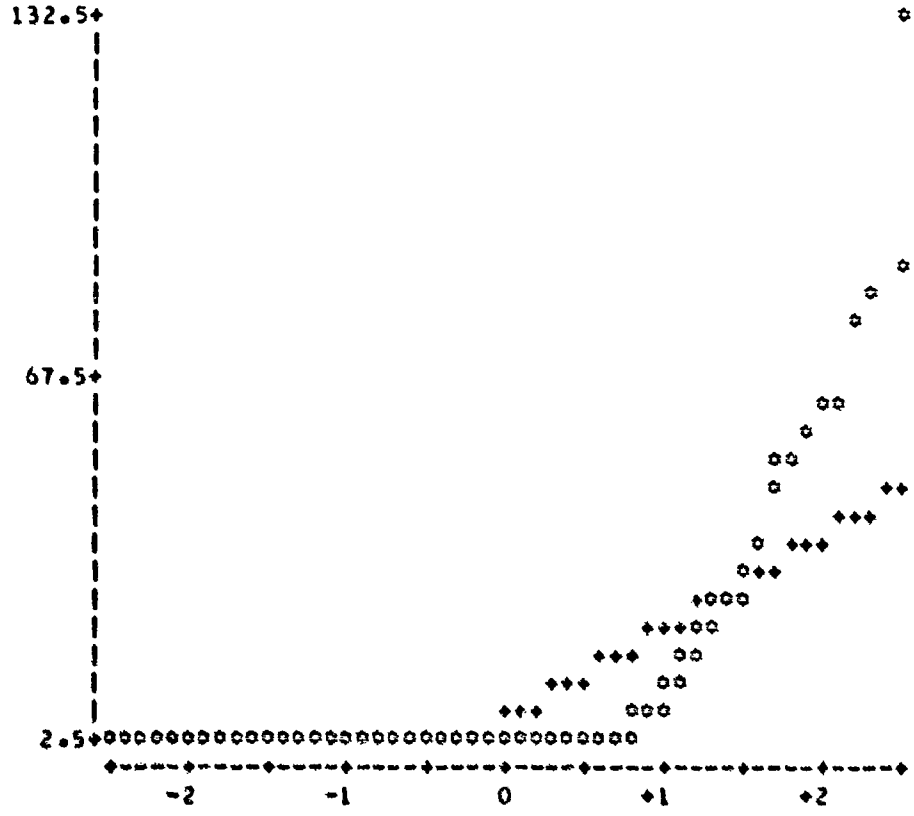
UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=LOW

UNIVARIATE

VARIABLE=UTEV

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=UTMAE

MOMENTS

N	240	SUM WGTS	240
MEAN	32.5987	SUM	7823.7
STD DEV	7.38384	VARIANCE	54.521
SKEWNESS	-0.694073	KURTOSIS	0.164876
USS	268073	CSS	13030.5
CV	22.6507	STD MEAN	0.476625
T:MEAN=0	68.395	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.104697	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	49	99%	47.044
75% Q3	38	95%	42.845
50% MED	34.45	90%	40.3
25% Q1	28.6	10%	21.41
0% MIN	9.9	5%	18.315
		1%	10.941
RANGE	39.1		
Q3-Q1	9.40001		
MODE	32		

EXTREMES

LOWEST	ID	HIGHEST	ID
9.9(	11)	45.2(	6)
10.9(	114)	45.2(	70)
11(	114)	46.1(	6)
14(	34)	47.7(	74)
15.5(	11)	49(	17)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

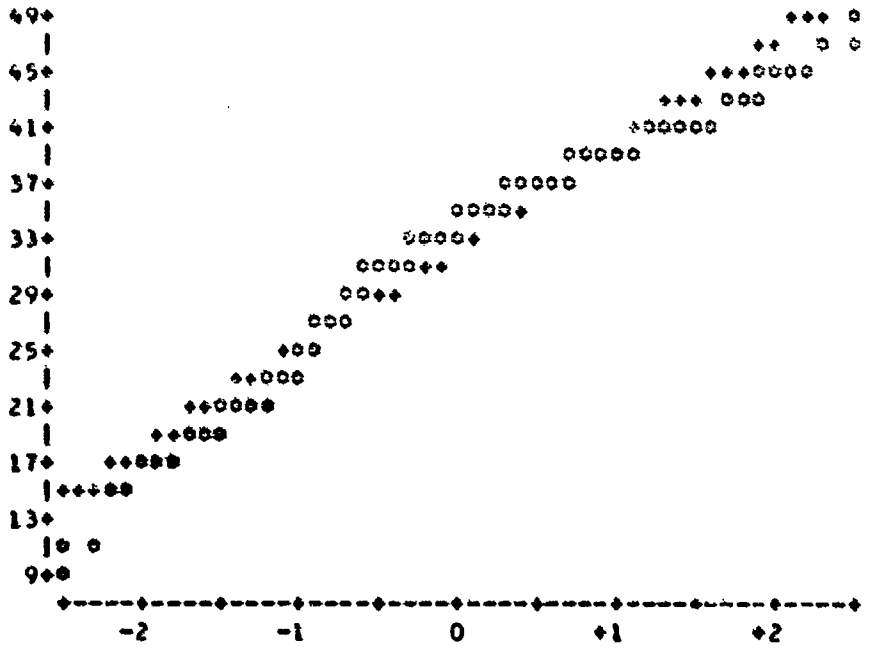
LEVEL=MEDIUM

UNIVARIATE

VARIABLE=UTMAE

STEM	LEAF	#	BOXPLOT
48	0	1	
46	17	2	
44	5722	4	
42	91379	5	
40	1112333446804556 78	18	
38	000112333446899901133345567788 9	31	
36	111223366678889990001222345 7	28	
34	014455777888890001112234455667788 99	35	
32	000001123445888122334569	24	
30	112355667788014455778 89	23	
28	0146660122489	13	
26	0018990349	10	
24	157047	6	
22	26792235567888	14	
20	00356661457	11	
18	023628	6	
16	0893	4	
14	05	2	0
12			
10	90	2	0
8	9	1	0

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=MEDIUM

UNIVARIATE

VARIABLE=UTEV

MOMENTS

N	240	SUM WGTS	240
MEAN	150	SUM	36000
STD DEV	132.2	VARIANCE	17476.9
SKEWNESS	1.89066	KURTOSIS	4.80763
USS	9576986	CSS	4176986
CV	88.1336	STD MEAN	8.5335
T:MEAN=0	17.5778	PROB>|T|	0.0001
SGN RANK	13983	PROB>|S|	0.0001
NUM ¬= 0	236		
D:NORMAL	0.131194	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	792	99%	683.71
75% Q3	193.75	95%	442.2
50% MED	124.5	90%	309.5
25% Q1	59.25	10%	20
0% MIN	0	5%	8
		1%	0
RANGE	792		
Q3-Q1	134.5		
MODE	95		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	114)	555(	80)
0(	114)	576(	78)
0(	34)	584(	64)
0(	11)	753(	74)
1(	191)	792(	17)

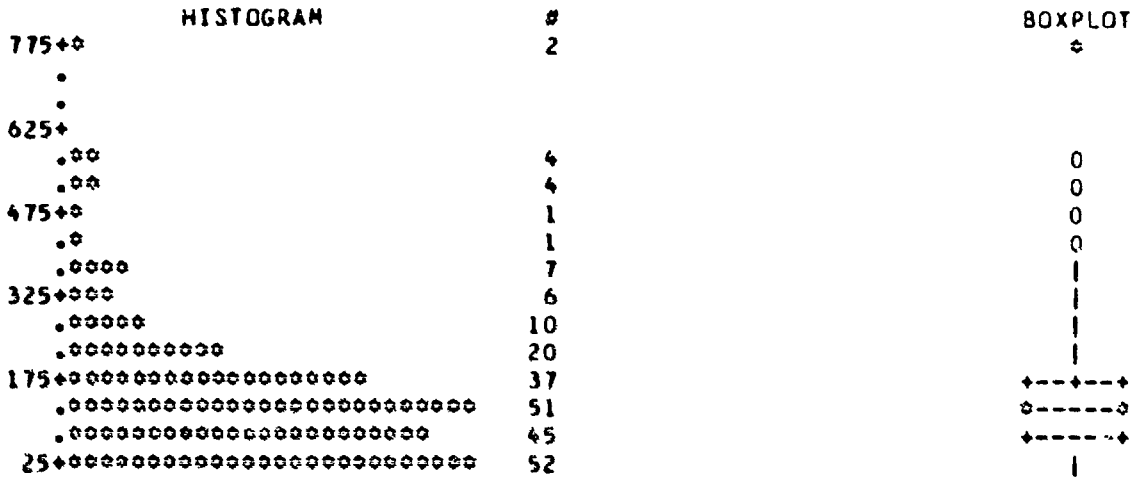
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

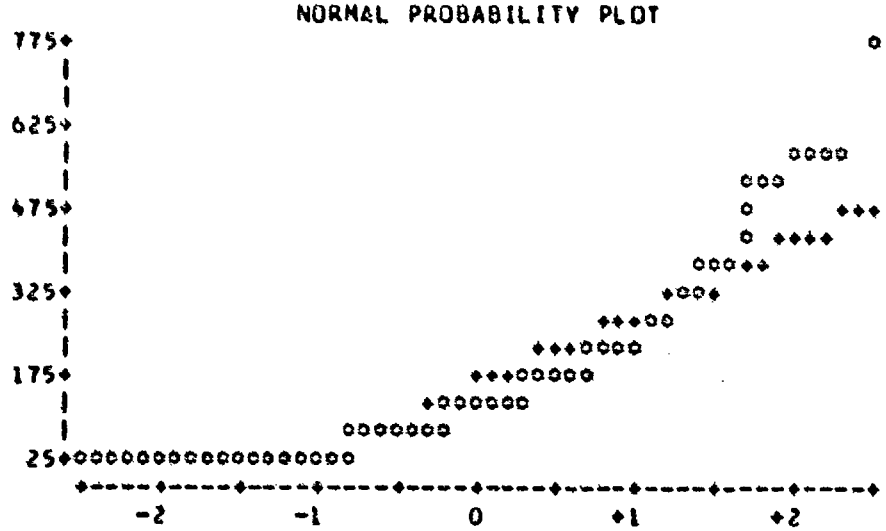
LEVEL=MEDIUM

UNIVARIATE

VARIABLE=UTEV



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=HIGH

UNIVARIATE

VARIABLE=UTMAE

MOMENTS

N	240	SUM WGTS	240
MEAN	36.5596	SUM	8774.3
STD DEV	6.0438	VARIANCE	36.5275
SKEWNESS	-0.529063	KURTOSIS	1.37879
USS	329515	CSS	8730.08
CV	16.5314	STD MEAN	0.390126
T:MEAN=0	93.7123	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ^= 0	240		
D:NORMAL	0.122618	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	54.1	99%	53.159
75% Q3	39.7	95%	45.68
50% MED	37.3	90%	42.39
25% Q1	34.4	10%	28.02
0% MIN	20	5%	23.325
		1%	20.223
RANGE	34.1		
Q3-Q1	5.3		
MODE	40		

EXTREMES

LOWEST	ID	HIGHEST	ID
20(	118)	48.8(	64)
20.1(	124)	53(	17)
20.4(	148)	53.1(	6)
20.6(	148)	53.2(	70)
20.6(	52)	54.1(	70)

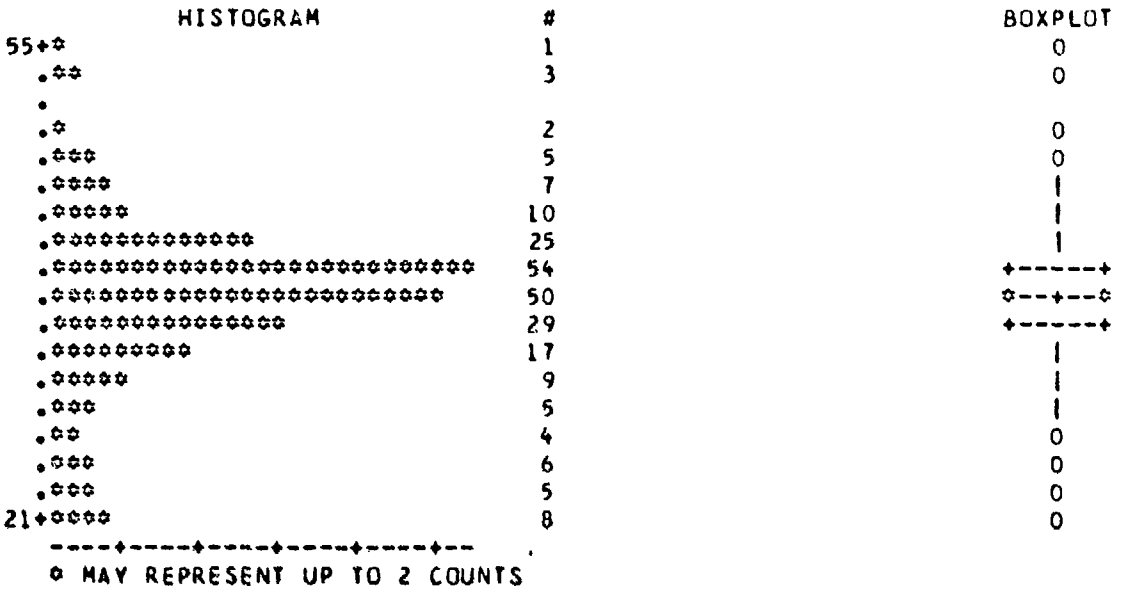
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

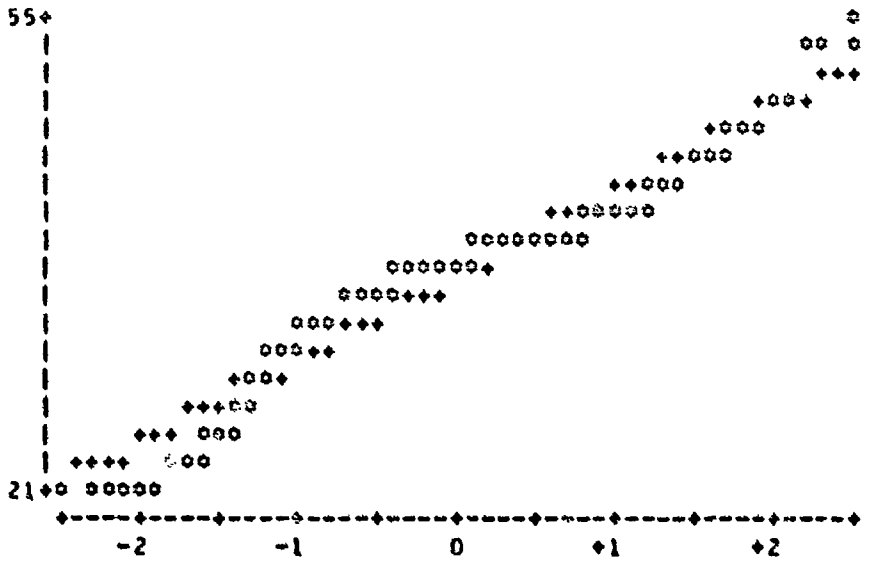
LEVEL=HIGH

UNIVARIATE

VARIABLE=UTMAE



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=HIGH

UNIVARIATE

VARIABLE=UTEV

MOMENTS

N	240	SUM WGTS	240
MEAN	406.012	SUM	97443
STD DEV	176.19	VARIANCE	31043.1
SKEWNESS	2.18496	KURTOSIS	6.52185
USS	46982375	CSS	7419299
CV	43.3953	STD MEAN	11.373
T:MEAN=0	35.6995	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.181193	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	1318	99%	1158.13
75% Q3	441.25	95%	791.35
50% MED	371.5	90%	575.7
25% Q1	314	10%	241.1
0% MIN	165	5%	199.15
		1%	166.23
RANGE	1153		
Q3-Q1	127.25		
MODE	386		

EXTREMES

LOWEST	ID	HIGHEST	ID
165(	124)	946(	64)
165(	118)	1118(	6)
168(	148)	1154(	17)
170(	148)	1161(	70)
173(	52)	1318(	70)

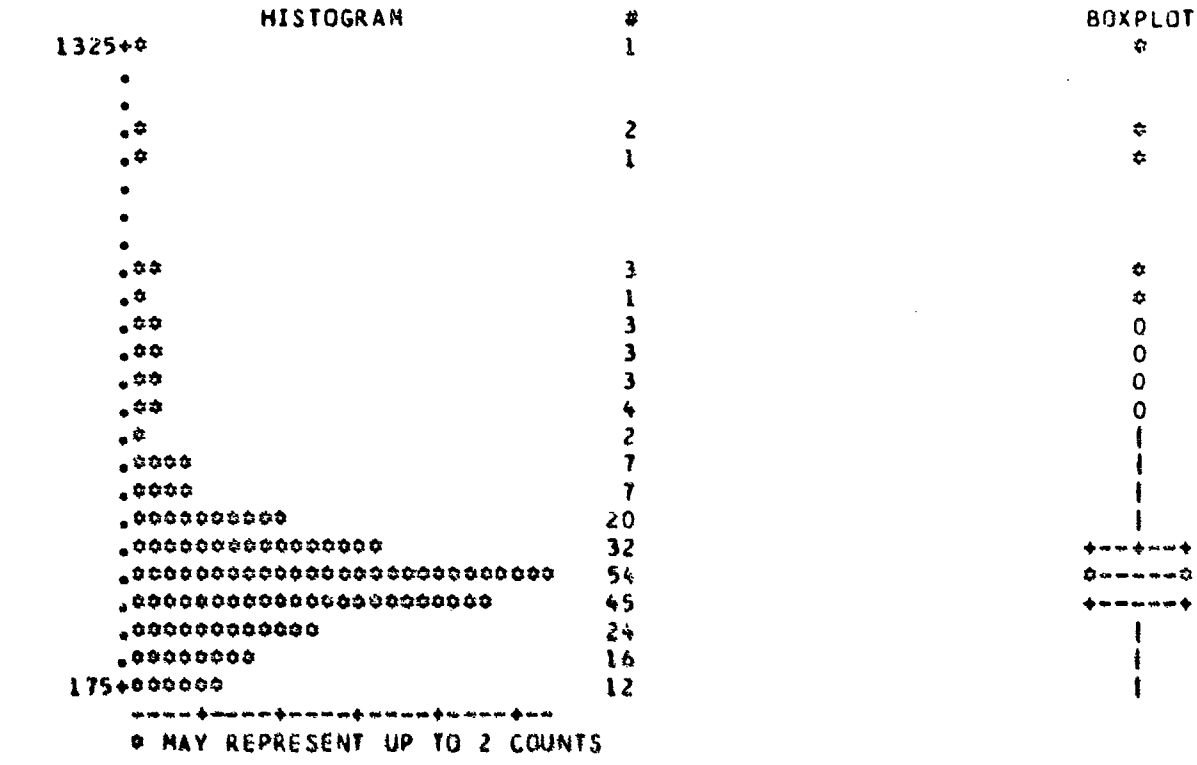
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=HIGH

UNIVARIATE

VARIABLE=UTEV



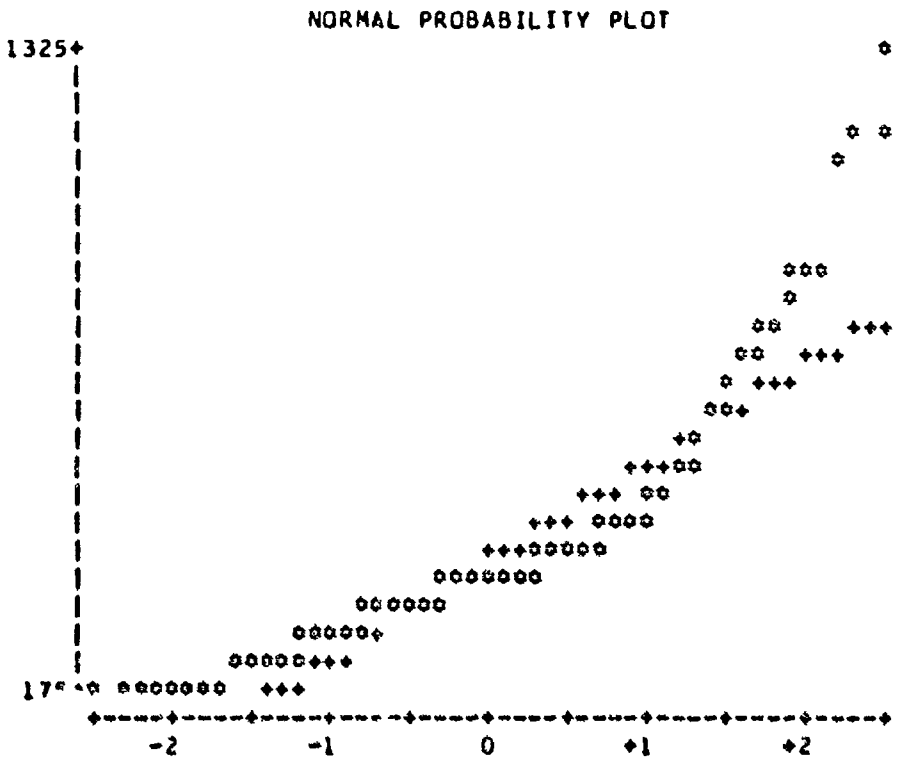
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR UNSTABLE TRACKING

LEVEL=HIGH

UNIVARIATE

VARIABLE=UTEV



Appendix B-1

SWAT Conversion Scales

SWAT Scales - Female Subjects

LEVELS			WHOLE GROUP	PROTOTYPE GROUPS		
T	E	S		TIME	EFFORT	STRESS
1	1	1	0.0	0.0	0.0	0.0
1	1	2	21.4	7.3	15.2	26.8
1	1	3	43.6	17.5	39.2	52.9
1	2	1	17.2	14.1	11.3	17.0
1	2	2	38.5	21.3	26.5	43.8
1	2	3	60.8	31.6	50.5	69.9
1	3	1	30.8	24.0	50.5	27.0
1	3	2	52.1	31.2	65.7	53.7
1	3	3	74.4	41.5	89.8	79.9
2	1	1	8.9	29.5	6.0	5.4
2	1	2	30.3	36.8	21.2	32.2
2	1	3	52.5	47.1	45.3	58.3
2	2	1	26.2	43.6	17.3	22.5
2	2	2	47.4	50.9	32.5	49.2
2	2	3	69.7	61.1	56.5	75.3
2	3	1	39.7	53.5	56.6	32.4
2	3	2	61.0	60.7	71.8	59.2
2	3	3	83.3	71.0	95.8	85.3
3	1	1	25.6	58.5	10.2	20.1
3	1	2	47.0	65.8	25.4	46.9
3	1	3	69.2	76.0	49.5	73.0
3	2	1	42.8	72.6	21.5	37.2
3	2	2	64.2	79.8	36.7	63.9
3	2	3	86.4	90.1	60.7	90.1
3	3	1	56.4	82.5	60.8	47.1
3	3	2	77.8	89.7	76.0	73.9
3	3	3	100.0	100.0	100.0	100.0

SWAT Scales - Male Subjects

LEVELS			WHOLE GROUP	PROTOTYPE GROUPS		
T	E	S		TIME	EFFORT	STRESS
1	1	1	0.0	0.0	0.0	0.0
1	1	2	23.3	15.3	12.0	25.4
1	1	3	43.9	26.4	28.4	55.4
1	2	1	14.6	10.2	31.8	17.1
1	2	2	37.9	25.6	43.8	42.5
1	2	3	58.5	36.6	60.2	72.6
1	3	1	29.1	17.5	54.7	26.3
1	3	2	52.4	32.8	66.7	51.7
1	3	3	73.0	43.8	83.0	81.7
2	1	1	11.2	26.0	8.5	6.1
2	1	2	34.5	41.3	20.5	31.5
2	1	3	55.1	52.4	36.9	61.5
2	2	1	25.8	36.2	40.3	23.2
2	2	2	49.1	51.6	52.3	48.6
2	2	3	69.7	62.6	68.6	78.7
2	3	1	40.3	43.4	63.1	32.4
2	3	2	63.6	58.8	75.1	57.8
2	3	3	84.2	69.8	91.5	87.8
3	1	1	27.0	56.2	17.0	18.3
3	1	2	50.3	71.5	29.0	43.6
3	1	3	70.9	82.5	45.3	73.7
3	2	1	41.6	66.4	48.7	35.4
3	2	2	64.9	81.8	60.7	60.8
3	2	3	85.5	92.8	77.1	90.8
3	3	1	56.1	73.6	71.6	44.6
3	3	2	79.4	89.0	83.6	69.9
3	3	3	100.0	100.0	100.0	100.0

SWAT Scales - All Subjects

LEVELS			PROTOTYPE GROUPS		
T	E	S	TIME	EFFORT	STRESS
1	1	1	0.0	0.0	0.0
1	1	2	13.0	13.1	24.2
1	1	3	23.7	27.2	53.8
1	2	1	10.4	23.9	16.2
1	2	2	23.4	37.0	40.4
1	2	3	34.2	51.2	70.0
1	3	1	18.3	54.9	26.7
1	3	2	31.2	67.9	50.9
1	3	3	42.0	82.1	80.5
2	1	1	27.6	10.3	7.0
2	1	2	40.6	23.4	31.2
2	1	3	51.4	37.5	60.8
2	2	1	38.1	34.2	23.2
2	2	2	51.0	47.3	47.4
2	2	3	61.8	61.5	77.0
2	3	1	45.9	65.2	33.7
2	3	2	58.9	78.2	57.9
2	3	3	69.6	92.4	87.5
3	1	1	58.0	17.9	19.5
3	1	2	70.9	31.0	43.7
3	1	3	81.7	45.1	73.3
3	2	1	68.4	41.8	35.7
3	2	2	81.4	54.9	59.9
3	2	3	92.2	69.1	89.5
3	3	1	76.3	72.8	46.2
3	3	2	89.2	85.8	70.4
3	3	3	100.0	100.0	100.0

Appendix B-2

SWAT Ordered Interval Scales

Average Ordered Rankings Based on Interval Scale - Female Subjects (Scale Values in Parentheses).

WHOLE GROUP		TIME		EFFORT		STRESS	
1 1 1	(0.0)	1 1 1	(0.0)	1 1 1	(0.0)	1 1 1	(0.0)
2 1 1	(8.9)	1 1 2	(7.3)	2 1 1	(6.0)	2 1 1	(5.4)
1 2 1	(17.2)	1 2 1	(14.1)	3 1 1	(10.2)	1 2 1	(17.0)
1 1 2	(21.4)	1 1 3	(17.5)	1 2 1	(11.3)	3 1 1	(20.1)
3 1 1	(25.6)	1 2 2	(21.3)	1 1 2	(15.2)	2 2 1	(22.5)
2 2 1	(26.2)	1 3 1	(24.0)	2 2 1	(17.3)	1 1 2	(26.8)
2 1 2	(30.3)	2 1 1	(29.5)	2 1 2	(21.2)	1 3 1	(27.0)
1 3 1	(30.8)	1 3 2	(31.2)	3 2 1	(21.5)	2 1 2	(32.2)
1 2 2	(38.5)	1 2 3	(31.6)	3 1 2	(25.4)	2 3 1	(32.4)
2 3 1	(39.7)	2 1 2	(36.8)	1 2 2	(26.5)	3 2 1	(37.2)
3 2 1	(42.8)	1 3 3	(41.5)	2 2 2	(32.5)	1 2 2	(43.8)
1 1 3	(43.6)	2 2 1	(43.6)	3 2 2	(36.7)	3 1 2	(46.9)
3 1 2	(47.0)	2 1 3	(47.1)	1 1 3	(39.2)	3 3 1	(47.1)
2 2 2	(47.4)	2 2 2	(50.9)	2 1 3	(45.3)	2 2 2	(49.2)
1 3 2	(52.1)	2 3 1	(53.5)	3 1 3	(49.5)	1 1 3	(52.9)
2 1 3	(52.5)	3 1 1	(58.5)	1 2 3	(50.5)	1 3 2	(53.7)
3 3 1	(56.4)	2 3 2	(60.7)	1 3 1	(50.5)	2 1 3	(58.3)
1 2 3	(60.8)	2 2 3	(61.1)	2 2 3	(56.5)	2 3 2	(59.2)
2 3 2	(61.0)	3 1 2	(65.8)	2 3 1	(56.6)	3 2 2	(63.9)
3 2 2	(64.2)	2 3 3	(71.0)	3 2 3	(60.7)	1 2 3	(69.9)
3 1 3	(69.2)	3 2 1	(72.6)	3 3 1	(60.8)	3 1 3	(73.0)
2 2 3	(69.7)	3 1 3	(76.0)	1 3 2	(65.7)	3 3 2	(73.9)
1 3 3	(74.4)	3 2 2	(79.8)	2 3 2	(71.8)	2 2 3	(75.3)
3 3 2	(77.8)	3 3 1	(82.5)	3 3 2	(76.0)	1 3 3	(79.9)
2 3 3	(83.3)	3 3 2	(89.7)	1 3 3	(89.8)	2 3 3	(85.3)
3 2 3	(86.4)	3 2 3	(90.1)	2 3 3	(95.8)	3 2 3	(90.1)
3 3 3	(100.0)	3 3 3	(100.0)	3 3 3	(100.0)	3 3 3	(100.0)

Average Ordered Rankings Based on Interval Scale - Male Subjects (Scale Values in Parentheses).

WHOLE GROUP		TIME		EFFORT		STRESS	
1 1 1	(0.0)	1 1 1	(0.0)	1 1 1	(0.0)	1 1 1	(0.0)
2 1 1	(11.2)	1 2 1	(10.2)	2 1 1	(8.5)	2 1 1	(6.1)
1 2 1	(14.6)	1 1 2	(15.3)	1 1 2	(12.0)	1 2 1	(17.1)
1 1 2	(23.3)	1 3 1	(17.5)	3 1 1	(17.0)	3 1 1	(18.3)
2 2 1	(25.8)	1 2 2	(25.6)	2 1 2	(20.5)	2 2 1	(23.2)
3 1 1	(27.0)	2 1 1	(26.0)	1 1 3	(28.4)	1 1 2	(25.4)
1 3 1	(29.1)	1 1 3	(26.4)	3 1 2	(29.0)	1 3 1	(26.3)
2 1 2	(34.5)	1 3 2	(32.8)	1 2 1	(31.8)	2 1 2	(31.5)
1 2 2	(37.9)	2 2 1	(36.2)	2 1 3	(36.9)	2 3 1	(32.4)
2 3 1	(40.3)	1 2 3	(36.6)	2 2 1	(40.3)	3 2 1	(35.4)
3 2 1	(41.6)	2 1 2	(41.3)	1 2 2	(43.8)	1 2 2	(42.5)
1 1 3	(43.9)	2 3 1	(43.4)	3 1 3	(45.3)	3 1 2	(43.6)
2 2 2	(49.1)	1 3 3	(43.8)	3 2 1	(48.7)	3 3 1	(44.6)
3 1 2	(50.3)	2 2 2	(51.6)	2 2 2	(52.3)	2 2 2	(48.6)
1 3 2	(52.4)	2 1 3	(52.4)	1 3 1	(54.7)	1 3 2	(51.7)
2 1 3	(55.1)	3 1 1	(56.2)	1 2 3	(60.2)	1 1 3	(55.4)
3 3 1	(56.1)	2 3 2	(58.8)	3 2 2	(60.7)	2 3 2	(57.8)
1 2 3	(58.5)	2 2 3	(62.6)	2 3 1	(63.1)	3 2 2	(60.8)
2 3 2	(63.6)	3 2 1	(66.4)	1 3 2	(66.7)	2 1 3	(61.5)
3 2 2	(64.9)	2 3 3	(69.8)	2 2 3	(68.6)	3 3 2	(69.9)
2 2 3	(69.7)	3 1 2	(71.5)	3 3 1	(71.6)	1 2 3	(72.6)
3 1 3	(70.9)	3 3 1	(73.6)	2 3 2	(75.1)	3 1 3	(73.7)
1 3 3	(73.0)	3 1 3	(82.5)	3 2 3	(77.1)	2 2 3	(78.7)
3 3 2	(79.4)	3 2 2	(81.8)	1 3 3	(83.0)	1 3 3	(81.7)
2 3 3	(84.2)	3 3 2	(89.0)	3 3 2	(83.6)	2 3 3	(87.8)
3 2 3	(85.5)	3 2 3	(92.3)	2 3 3	(91.5)	3 2 3	(90.8)
3 3 3	(100.0)	3 3 3	(100.0)	3 3 3	(100.0)	3 3 3	(100.0)

Average Ordered Rankings Based on Interval Scale - All Subjects (Scale Values in Parentheses).

TIME		EFFORT		STRESS	
1 1 1	(0.0)	1 1 1	(0.0)	1 1 1	(0.0)
1 2 1	(10.4)	2 1 1	(10.3)	2 1 1	(7.0)
1 1 2	(13.0)	1 1 2	(13.1)	1 2 1	(16.2)
1 3 1	(18.3)	3 1 1	(17.9)	3 1 1	(19.5)
1 2 2	(23.4)	2 1 2	(23.4)	2 2 1	(23.2)
1 1 3	(23.7)	1 2 1	(23.9)	1 1 2	(24.2)
2 1 1	(27.6)	1 1 3	(27.2)	1 3 1	(26.7)
1 3 2	(31.2)	3 1 2	(31.0)	2 1 2	(31.2)
1 2 3	(34.2)	2 2 1	(34.2)	2 3 1	(33.7)
2 2 1	(38.1)	1 2 2	(37.0)	3 2 1	(35.7)
2 1 2	(40.6)	2 1 3	(37.5)	1 2 2	(40.4)
1 3 3	(42.0)	3 2 1	(41.8)	3 1 2	(43.7)
2 3 1	(45.9)	3 1 3	(45.1)	3 3 1	(46.2)
2 2 2	(51.0)	2 2 2	(47.3)	2 2 2	(47.4)
2 1 3	(51.4)	1 2 3	(51.2)	1 3 2	(50.9)
3 1 1	(58.0)	1 3 1	(54.9)	1 1 3	(53.8)
2 3 2	(58.9)	3 2 2	(54.9)	2 3 2	(57.9)
2 2 3	(61.8)	2 2 3	(61.5)	3 2 2	(59.9)
3 2 1	(68.4)	2 3 1	(65.2)	2 1 3	(60.8)
2 3 3	(69.6)	1 3 2	(67.9)	1 2 3	(70.0)
3 1 2	(70.9)	3 2 3	(69.1)	2 2 3	(77.0)
3 3 1	(76.3)	3 3 1	(72.8)	3 3 2	(70.4)
3 2 2	(81.4)	2 3 2	(78.2)	3 1 3	(73.3)
3 1 3	(81.7)	1 3 3	(82.1)	1 3 3	(80.5)
3 3 2	(89.2)	3 3 2	(85.8)	2 3 3	(87.5)
3 2 3	(92.2)	2 3 3	(92.4)	3 2 3	(89.5)
3 3 3	(100.0)	3 3 3	(100.0)	3 3 3	(100.0)

Appendix B-3

SWAT Ratings - Average and Variability Across Tasks by Subject

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
1	10.5	12.1	0.0	23.9	9.6	12.0	0.0	23.9
2	17.2	15.3	0.0	69.9	20.2	16.4	0.0	69.9
3	3.7	6.4	0.0	17.4	3.7	6.4	0.0	17.4
4	37.5	21.6	0.0	69.6	22.4	22.7	0.0	51.0
5	37.6	32.2	0.0	100.0	42.8	33.5	0.0	100.0
6	28.8	23.2	0.0	77.0	26.8	18.5	0.0	69.9
7	40.7	24.7	0.0	100.0	51.9	23.9	0.0	92.8
8	24.5	20.9	0.0	83.0	12.1	15.0	0.0	43.8
9	15.2	21.1	0.0	60.7	9.6	13.2	0.0	43.8
10	7.2	9.1	0.0	25.4	11.7	13.7	0.0	48.6
11	43.4	24.0	0.0	100.0	43.5	27.5	0.0	100.0
13	19.4	17.1	0.0	57.9	18.3	16.6	0.0	70.0
16	21.9	19.4	0.0	69.9	23.0	19.7	0.0	59.4
17	32.9	33.2	0.0	80.5	18.7	23.3	0.0	80.5
18	62.1	23.4	0.0	84.2	35.6	18.4	0.0	69.7
19	38.4	30.7	0.0	86.4	38.8	31.8	0.0	100.0
20	26.8	19.6	0.0	60.8	29.6	23.6	0.0	69.9
21	23.4	17.3	0.0	57.9	22.8	19.6	0.0	59.4
22	22.2	28.6	0.0	100.0	19.0	31.0	0.0	100.0

(CONTINUED)

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
23	32.0	28.8	0.0	99.5	17.7	30.6	0.0	99.5
24	37.2	31.1	0.0	100.0	40.9	38.9	0.0	100.0
25	29.1	20.7	0.0	87.8	26.1	17.0	0.0	81.7
26	30.1	28.6	0.0	69.9	30.4	25.5	0.0	69.9
27	47.4	22.0	19.0	99.5	45.6	23.4	7.0	99.5
28	34.5	28.0	0.0	99.5	27.7	19.6	0.0	59.4
29	17.8	19.9	0.0	68.4	22.9	20.0	0.0	51.0
30	30.9	19.2	0.0	81.4	35.1	20.8	0.0	81.4
31	23.9	20.3	0.0	69.9	29.6	22.3	0.0	69.9
33	17.8	14.2	0.0	57.9	12.0	22.4	0.0	99.5
34	5.7	10.9	0.0	45.7	8.0	12.8	0.0	45.7
36	27.9	17.9	0.0	60.2	30.9	21.4	0.0	83.0
37	19.6	18.9	0.0	79.4	21.1	18.0	0.0	64.9
38	37.0	29.2	0.0	99.5	33.8	26.7	0.0	87.5
41	60.0	24.1	0.0	99.5	82.6	22.0	24.2	99.5
42	22.8	28.1	0.0	99.5	24.1	28.1	0.0	99.5
44	41.4	30.6	0.0	100.0	49.0	29.3	0.0	100.0
45	29.3	18.9	0.0	57.9	26.8	15.3	0.0	59.4
47	8.8	9.5	0.0	26.3	7.8	9.6	0.0	26.3

(CONTINUED)

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
49	27.2	29.1	0.0	99.5	31.0	28.9	0.0	87.5
50	8.4	9.9	0.0	25.4	13.8	13.9	0.0	42.5
51	6.7	9.5	0.0	30.8	3.4	7.0	0.0	17.2
52	12.0	11.7	0.0	58.8	20.3	25.1	0.0	89.0
53	22.0	18.8	0.0	69.9	18.2	16.9	0.0	44.6
54	31.3	14.8	18.2	69.9	30.2	13.2	6.1	69.9
55	54.5	14.5	0.0	69.9	42.1	19.1	0.0	99.5
56	29.1	24.2	0.0	87.5	24.9	17.4	0.0	50.9
57	6.5	13.2	0.0	57.9	2.4	8.8	0.0	40.4
58	10.0	9.2	0.0	26.3	12.3	12.9	0.0	44.6
59	19.0	19.0	0.0	72.6	13.0	14.8	0.0	51.7
60	52.1	18.7	19.0	99.5	33.1	20.0	7.0	59.4
61	39.5	28.6	0.0	89.0	33.6	28.5	0.0	89.0
63	13.7	14.6	0.0	51.7	9.9	10.9	0.0	42.5
64	16.2	15.2	0.0	57.8	15.7	15.5	0.0	57.8
65	32.0	22.0	0.0	100.0	36.2	31.4	0.0	100.0
66	39.1	26.4	0.0	89.0	32.7	25.5	0.0	89.0
67	19.5	22.6	0.0	66.7	18.1	19.7	0.0	43.8
68	30.7	14.5	0.0	51.6	27.1	14.6	0.0	51.6

(CONTINUED)

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
69	40.4	31.2	0.0	100.0	35.3	32.9	0.0	100.0
70	31.6	33.3	0.0	100.0	37.6	36.3	0.0	100.0
71	33.4	21.6	0.0	83.6	34.6	21.4	0.0	83.0
72	14.0	10.9	6.1	44.6	14.7	12.8	6.1	44.6
73	18.8	16.2	0.0	60.8	19.9	17.2	0.0	69.9
74	14.0	17.9	0.0	69.8	12.7	12.4	0.0	32.8
75	8.9	20.5	0.0	72.6	2.7	6.4	0.0	17.1
76	7.6	12.2	0.0	51.7	23.4	13.3	0.0	42.5
77	13.3	14.7	0.0	51.6	10.5	13.8	0.0	51.6
78	9.3	11.7	0.0	37.9	10.4	12.0	0.0	37.9
79	37.6	20.0	18.2	100.0	34.5	17.8	18.2	90.8
80	13.2	16.6	0.0	49.1	12.1	17.8	0.0	64.9
85	30.8	24.8	0.0	100.0	40.5	23.2	0.0	89.0
86	32.1	20.9	0.0	79.4	30.6	21.4	0.0	79.4
87	24.7	13.8	0.0	69.9	23.2	14.3	0.0	69.9
88	33.3	33.5	0.0	100.0	33.1	38.2	0.0	100.0
89	31.9	24.2	0.0	100.0	39.9	24.9	0.0	83.6
91	26.2	25.7	0.0	83.6	25.6	25.3	0.0	83.6
93	16.5	15.1	0.0	51.6	15.2	15.1	0.0	58.8

(CONTINUED)

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
94	42.6	23.8	0.0	84.2	41.2	27.8	0.0	100.0
95	28.4	24.0	0.0	100.0	30.1	22.9	0.0	90.8
101	9.4	14.6	0.0	58.8	13.5	23.4	0.0	89.0
102	56.8	20.4	26.4	100.0	51.6	23.3	0.0	89.0
103	18.4	20.6	0.0	87.8	22.6	21.3	0.0	87.8
104	13.8	12.7	0.0	51.7	14.1	12.8	0.0	51.7
105	29.4	20.1	0.0	69.9	28.0	23.3	0.0	90.8
106	22.0	22.2	0.0	66.7	24.1	20.2	0.0	66.7
107	37.2	13.8	0.0	52.2	32.2	17.9	0.0	60.2
108	30.3	19.3	6.1	90.8	26.2	22.0	0.0	100.0
109	34.2	24.7	0.0	100.0	35.7	29.2	0.0	100.0
110	14.3	14.9	0.0	42.5	16.4	16.3	0.0	51.7
111	43.8	22.9	0.0	87.8	50.6	27.4	0.0	100.0
112	19.7	25.5	0.0	100.0	16.8	26.8	0.0	100.0
114	45.1	29.7	0.0	90.8	48.3	26.7	0.0	100.0
115	34.4	21.1	0.0	77.1	32.5	26.2	0.0	83.6
116	34.2	27.6	0.0	100.0	27.1	26.9	0.0	100.0
117	26.1	25.3	0.0	100.0	23.2	20.5	0.0	57.8
118	25.6	23.5	0.0	90.8	30.2	24.6	0.0	100.0

(CONTINUED)

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
119	65.5	23.4	0.0	100.0	64.7	23.2	26.0	100.0
120	15.5	24.9	0.0	72.6	13.4	20.3	0.0	51.7
121	45.2	28.0	0.0	100.0	46.1	33.8	0.0	100.0
122	30.9	30.3	0.0	90.8	33.1	34.7	0.0	100.0
123	14.6	24.7	0.0	100.0	12.3	18.0	0.0	69.8
124	20.7	16.5	0.0	51.7	27.2	20.3	0.0	57.8
125	54.6	27.7	8.5	100.0	52.7	23.8	8.5	100.0
126	31.1	14.8	11.2	64.9	31.6	12.8	11.2	64.9
127	26.8	29.7	0.0	100.0	29.4	27.7	0.0	100.0
128	24.7	22.2	0.0	90.8	26.5	19.2	0.0	69.9
129	12.9	18.3	0.0	71.5	13.1	19.1	0.0	71.5
131	41.3	26.3	0.0	72.6	37.0	26.0	0.0	90.8
132	19.1	15.8	0.0	63.6	20.1	18.0	0.0	64.9
133	29.5	24.5	0.0	100.0	31.6	24.7	0.0	100.0
134	9.2	7.9	0.0	32.8	9.5	10.9	0.0	36.6
135	26.3	16.0	0.0	61.5	27.0	21.6	0.0	78.7
137	16.0	20.2	0.0	57.8	16.6	20.0	0.0	57.8
138	26.6	29.4	8.5	100.0	35.2	25.5	8.5	91.5
140	39.7	30.0	0.0	100.0	44.4	31.7	0.0	100.0

(CONTINUED)

USAF/SCEEE LARGE-SCALE CTS STUDY

SWAT RATINGS (MEAN AND STANDARD DEVIATION ACROSS TASKS)
BY INDIVIDUAL SUBJECT

	TRIAL							
	06				08			
	SWAT				SWAT			
	MEAN	STD	MIN	MAX	MEAN	STD	MIN	MAX
ID								
141	18.0	15.1	0.0	55.4	21.0	24.6	0.0	81.7
142	39.9	18.3	0.0	81.7	41.4	24.1	0.0	81.7
143	21.8	24.5	0.0	100.0	22.2	20.3	0.0	69.9
144	18.0	20.5	0.0	64.9	15.6	20.7	0.0	79.4
145	9.3	20.6	0.0	100.0	11.4	21.0	0.0	100.0
146	11.7	13.7	0.0	48.6	15.5	17.5	0.0	51.7
147	40.5	27.0	0.0	87.8	55.1	20.9	23.2	90.8
148	53.0	15.2	0.0	100.0	28.2	23.8	0.0	100.0
150	33.8	17.8	0.0	69.9	27.8	10.1	0.0	35.4

Appendix B-4

SWAT Ratings - Univariate Summaries by Task and Level

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=CR LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	18.295	SUM	4500.58
STD DEV	17.2566	VARIANCE	297.79
SKEWNESS	1.05959	KURTOSIS	1.01904
USS	155297	CSS	72958.6
CV	94.3239	STD MEAN	1.10024
T:MEAN=0	16.6282	PROB>|T|	0.0001
SGN RANK	8145	PROB>|S|	0.0001
NUM ¬= 0	180		
D:NORMAL	0.155744	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	81.76	99%	76.0965
75% Q3	27.79	95%	52.0155
50% MED	17.14	90%	42.52
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	81.76		
Q3-Q1	27.79		
MODE	0		

EXTREMES

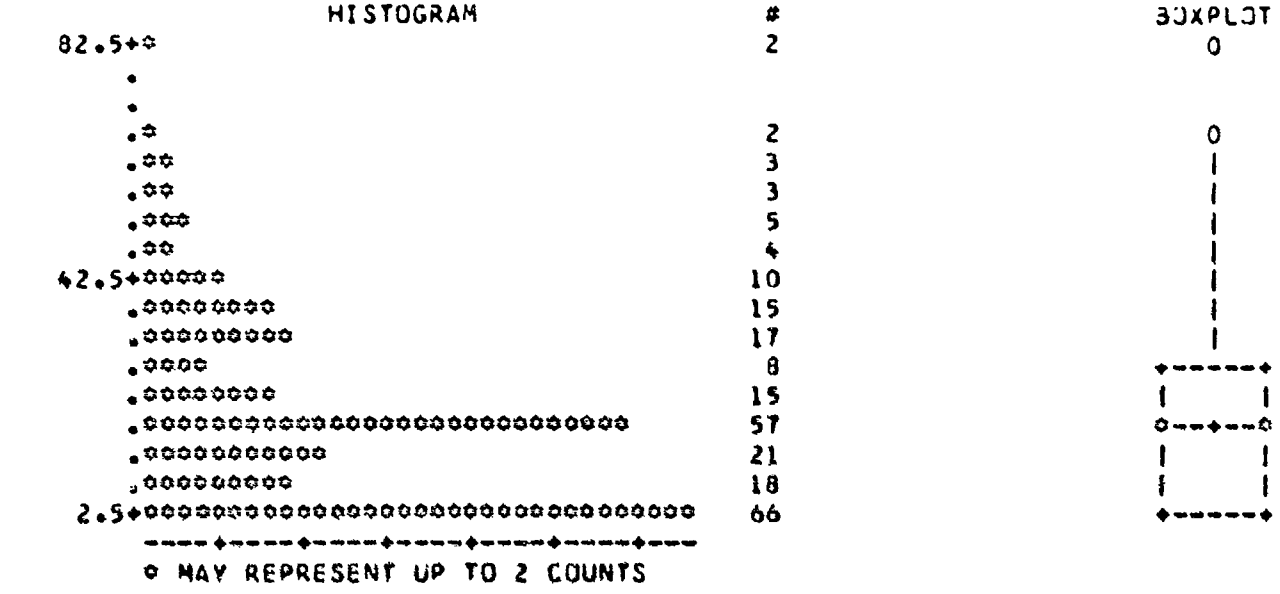
LOWEST	ID	HIGHEST	ID
0(	146)	60.77(	131)
0(	146)	66.42(	7)
0(	145)	69.71(	10)
0(	145)	81.76(	119)
0(	144)	81.76(	119)

UNIVARIATE SUMMARY FOR SWAT RATINGS

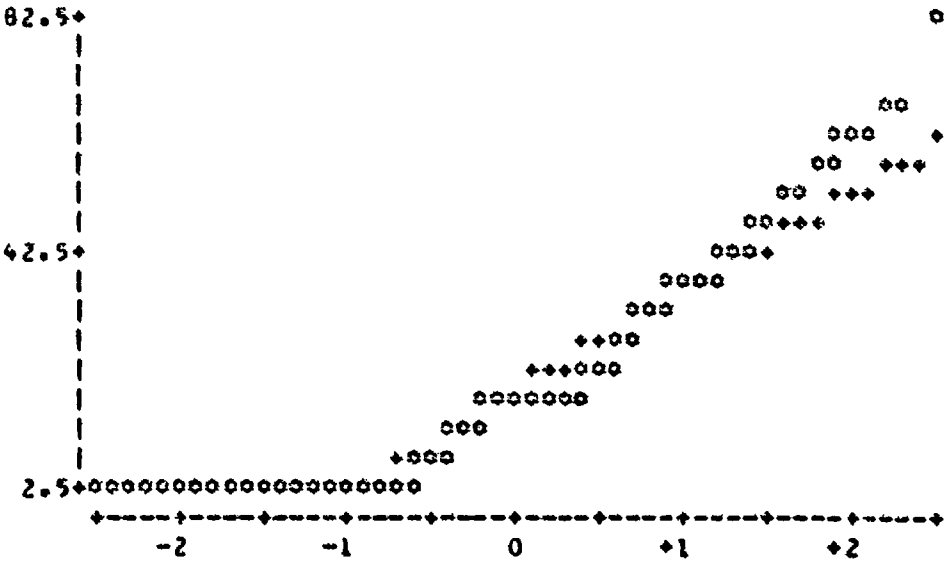
TASK=CR LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT



NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=CR LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	66	26.8	26.8	31.78	9	3.7	81.3
6.08	11	4.5	31.3	33.72	1	0.4	81.7
7	3	1.2	32.5	34.48	1	0.4	82.1
8.48	4	1.6	34.1	35.17	2	0.8	82.9
10.25	12	4.9	39.0	35.39	6	2.4	85.4
10.44	4	1.6	40.7	36.24	3	1.2	86.6
11.18	2	0.8	41.5	37	1	0.4	87.0
12.01	1	0.4	41.9	37.9	3	1.2	88.2
14.6	2	0.8	42.7	40.25	1	0.4	88.6
15.34	1	0.4	43.1	40.38	2	0.8	89.4
16.17	9	3.7	46.7	41.57	1	0.4	89.8
17.14	37	15.0	61.8	42.52	3	1.2	91.1
18.24	9	3.7	65.4	43.21	1	0.4	91.5
19	1	0.4	65.9	43.62	2	0.8	92.3
23.17	2	0.8	66.7	47.38	1	0.4	92.7
23.23	11	4.5	71.1	48.73	2	0.8	93.5
23.4	2	0.8	72.0	49.08	1	0.4	93.9
25.37	1	0.4	72.4	51.58	3	1.2	95.1
25.59	2	0.8	73.2	52.25	2	0.8	95.9
25.78	2	0.8	74.0	59.38	3	1.2	97.2
25.99	2	0.8	74.8	60.77	3	1.2	98.4
26.97	1	0.4	75.2	66.42	1	0.4	98.8
30.25	2	0.8	76.0	69.71	1	0.4	99.2
31.46	4	1.6	77.6	81.76	2	0.8	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=CR LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	34.4172	SUM	8466.62
STD DEV	18.4422	VARIANCE	340.114
SKEWNESS	0.276349	KURTOSIS	-0.485194
USS	374725	CSS	83327.9
CV	53.5843	STD MEAN	1.17593
T:MEAN=0	29.2705	PROB>|T|	0.0001
SGN RANK	14101.5	PROB>|S|	0.0001
NUM ^= 0	237		
D:NORMAL	0.102925	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	87.84	99%	84.9824
75% Q3	48.61	95%	60.77
50% MED	35.28	90%	60.73
25% Q1	17.14	10%	10.383
0% MIN	0	5%	10.25
		1%	0
RANGE	87.84		
Q3-Q1	31.47		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	145)	73.62(	119)
0(	75)	73.62(	119)
0(	63)	81.76(	7)
0(	57)	87.84(	88)
0(	51)	87.84(	147)

UNIVARIATE SUMMARY FOR SWAT RATINGS

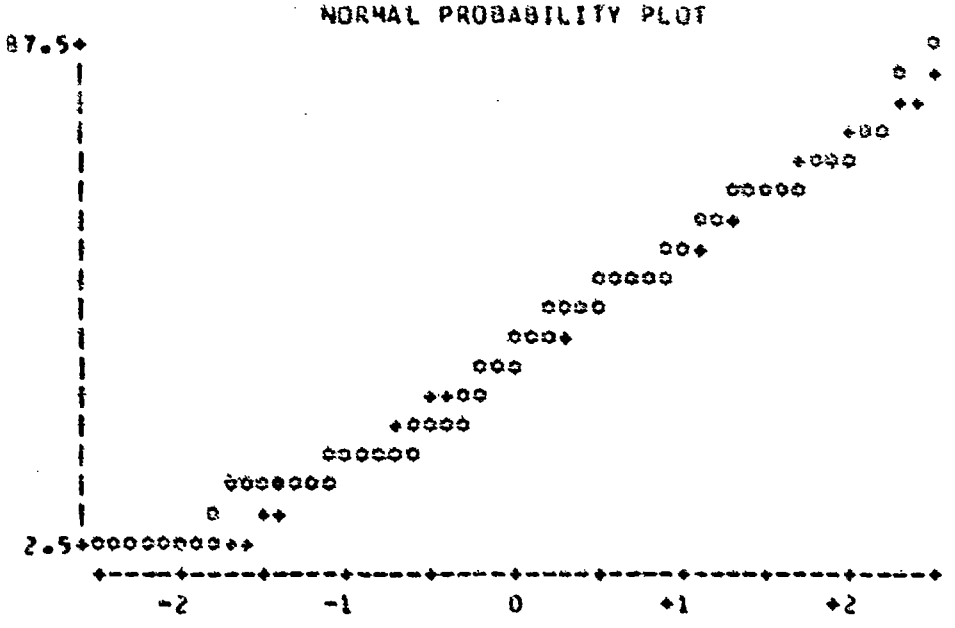
TASK=CR LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

```
STEM LEAF                                                    #    BOXPLOT
   8 88                                                      2       |
   8 2                                                       1       |
   7                                                                 |
   7 000044                                                  6       |
   6 6                                                       1       |
   6 1111111111111113                                       16       |
   5 5889999999                                             10       |
   5 11122222222                                            11       |
   4 55777777779999999999999999999                          29    +-----+
   4 00000000223333333333333334444                          29    |     |
   3 555555555555566667888                                  20    o-----o
   3 2222222222222233                                       16    |  +  |
   2 6666666666                                             10    |     |
   2 3333333333333333333333333344                           26    |     |
   1 55555566666666667777777777777777777777777789           42    +-----+
   1 00000000000000002                                      17       |
   0 6                                                       1       |
   0 000000000                                               9       |
     ----+----+----+----+----+----+----+----+----+----+--
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=CR LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
0	9	3.7	3.7
6.08	1	0.4	4.1
10.25	14	5.7	9.8
10.44	2	0.8	10.6
12.01	1	0.4	11.0
14.6	6	2.4	13.4
16.17	10	4.1	17.5
17.14	22	8.9	26.4
17.19	1	0.4	26.8
18.24	2	0.8	27.6
19	1	0.4	28.0
23.17	7	2.8	30.9
23.23	14	5.7	36.6
23.4	3	1.2	37.8
23.93	2	0.8	38.6
25.59	2	0.8	39.4
25.78	6	2.4	41.9
25.99	1	0.4	42.3
26.31	1	0.4	42.7
31.78	14	5.7	48.4
32.79	2	0.8	49.2
35.17	2	0.8	50.0
35.39	11	4.5	54.5
36.24	3	1.2	55.7
37	1	0.4	56.1
37.9	2	0.8	56.9
38.07	1	0.4	57.3
40.25	3	1.2	58.5
40.38	5	2.0	60.6
41.57	2	0.8	61.4
42.52	15	6.1	67.5
43.78	4	1.6	69.1
44.56	2	0.8	69.9
47.38	6	2.4	72.4
47.44	2	0.8	73.2
48.61	16	6.5	79.7
49.08	3	1.2	80.9
51.03	2	0.8	81.7
51.17	1	0.4	82.1
51.58	5	2.0	84.1
51.69	1	0.4	84.6
52.25	1	0.4	85.0
52.37	1	0.4	85.4
57.78	2	0.8	86.2
57.93	1	0.4	86.6
58.78	2	0.8	87.4
59.38	5	2.0	89.4
60.73	5	2.0	91.5
60.77	10	4.1	95.5
62.62	1	0.4	95.9
66.42	1	0.4	96.3
69.71	2	0.8	97.2
69.94	2	0.8	96.0
73.62	2	0.8	98.8
81.76	1	0.4	99.2
87.84	2	0.8	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=CR LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	55.9993	SUM	13775.8
STD DEV	24.1634	VARIANCE	583.871
SKEWNESS	0.181862	KURTOSIS	-0.684148
USS	914487	CSS	143048
CV	43.1495	STD MEAN	1.5406
T:MEAN=0	36.349	PROB>|T|	0.0001
SGN RANK	15067.5	PROB>|S|	0.0001
NUM ¬= 0	245		
D:NORMAL	0.0762157	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	100
75% Q3	69.94	95%	100
50% MED	52.25	90%	91.298
25% Q1	40.2725	10%	23.23
0% MIN	0	5%	17.14
		1%	10.25
RANGE	100		
Q3-Q1	29.6675		
MODE	100		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	34)	100(	130)
10.25(	101)	100(	140)
10.25(	52)	100(	140)
14.6(	145)	100(	148)
14.6(	78)	100(	148)

UNIVARIATE SUMMARY FOR SWAT RATINGS

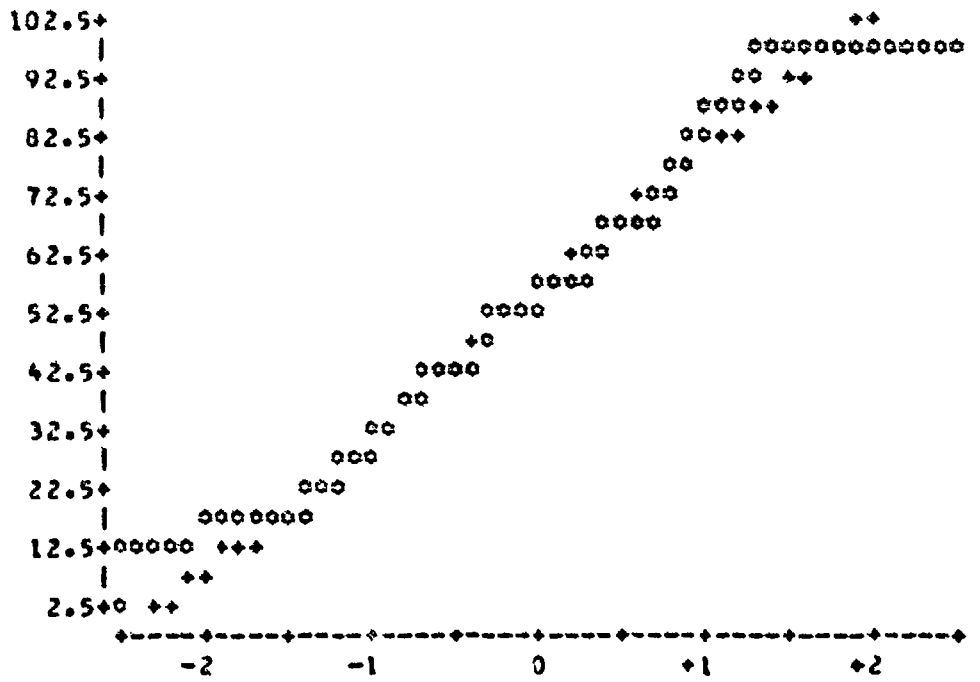
TASK=CR LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

```
STEM LEAF                                  #    BOXPLOT
  10 00000000000000000000000              23       |
   9                                                 |
   9 111112                                6       |
   8 88868899                              8       |
   8 12222334444                          11       |
   7 7999                                  4       |
   7 000030000000000000033444             23       |
   6 5577777779                           10    +------+
   6 11111111                              8    |      |
   5 5688888888888888888899999999         29    |  +   |
   5 11111111112222222222222222222       28    *------*
   4 5555556777999                        13    |      |
   4 000000022333344444444444             24    +------+
   3 5555566888                           10       |
   3 11222233333                          11       |
   2 66666666669                          11       |
   2 33333344                              8       |
   1 5567777777777777                     16       |
   1 00                                    2       |
   0                                               |
   0 0                                     1       |
     ----+----+----+----+----+----
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=CR LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	1	0.4	0.4	51.69	13	5.3	49.2
10.25	2	0.8	1.2	52.25	3	1.2	50.4
14.6	2	0.8	2.0	55.43	1	0.4	50.8
16.17	1	0.4	2.4	56.07	1	0.4	51.2
17.14	7	2.8	5.3	57.78	10	4.1	55.3
17.19	2	0.8	6.1	57.93	9	3.7	58.9
17.45	4	1.6	7.7	58.78	3	1.2	60.2
23.17	2	0.8	8.5	58.87	1	0.4	60.6
23.23	4	1.6	10.2	59.38	4	1.6	62.2
23.93	2	0.8	11.0	60.77	8	3.3	65.4
25.59	4	1.6	12.6	64.87	2	0.8	66.3
25.78	2	0.8	13.4	66.67	7	2.8	69.1
26.31	4	1.6	15.0	68.63	1	0.4	69.5
29.1	1	0.4	15.4	69.71	2	0.8	70.3
31.24	2	0.8	16.3	69.82	2	0.8	71.1
32.4	4	1.6	17.9	69.93	4	1.6	72.8
32.79	5	2.0	19.9	69.94	10	4.1	76.8
35.17	2	0.8	20.7	72.58	2	0.8	77.6
35.39	3	1.2	22.0	73.62	3	1.2	78.9
36.24	2	0.8	22.8	76.96	1	0.4	79.3
37.9	3	1.2	24.0	78.67	1	0.4	79.7
40.25	2	0.8	24.8	79.37	2	0.8	80.5
40.28	2	0.8	25.6	80.51	1	0.4	80.9
40.38	4	1.6	27.2	81.75	2	0.8	81.7
41.57	2	0.8	28.0	81.76	1	0.4	82.1
42.52	3	1.2	29.3	82.09	1	0.4	82.5
43.44	1	0.4	29.7	83.25	2	0.8	83.3
43.78	8	3.3	32.9	83.62	2	0.8	84.1
43.83	2	0.8	33.7	84.21	2	0.8	85.0
44.56	6	2.4	36.2	87.51	1	0.4	85.4
45.72	1	0.4	36.6	87.84	5	2.0	87.4
47.38	3	1.2	37.8	88.96	2	0.8	88.2
48.61	2	0.8	38.6	90.83	5	2.0	90.2
49.08	1	0.4	39.0	92.39	1	0.4	90.7
50.93	5	2.0	41.1	99.51	1	0.4	91.1
51.03	5	2.0	43.1	100	22	8.9	100.0
51.58	2	0.8	43.9				

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	27.3125	SUM	6718.87
STD DEV	20.482	VARIANCE	419.511
SKEWNESS	0.788043	KURTOSIS	0.502215
USS	286289	CSS	102780
CV	74.9913	STD MEAN	1.30588
T:MEAN=0	20.915	PROB>|T|	0.0001
SGN RANK	11183	PROB>|S|	0.0001
NUM ¬= 0	211		
D:NORMAL	0.128591	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	88.96
75% Q3	42.52	95%	60.77
50% MED	23.23	90%	52.25
25% Q1	14.6	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	27.92		
MODE	0		

EXTREMES

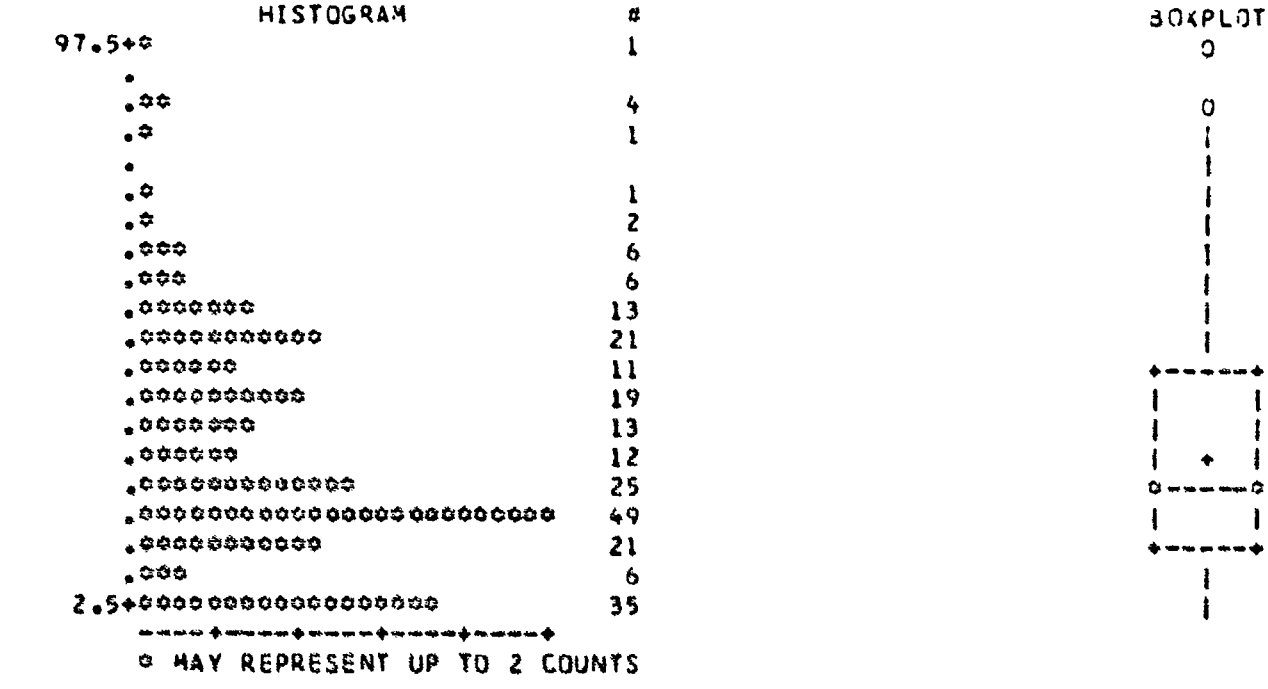
LOWEST	ID	HIGHEST	ID
0(	146)	87.51(	41)
0(	146)	88.96(	102)
0(	144)	88.96(	119)
0(	129)	88.96(	119)
0(	123)	99.51(	41)

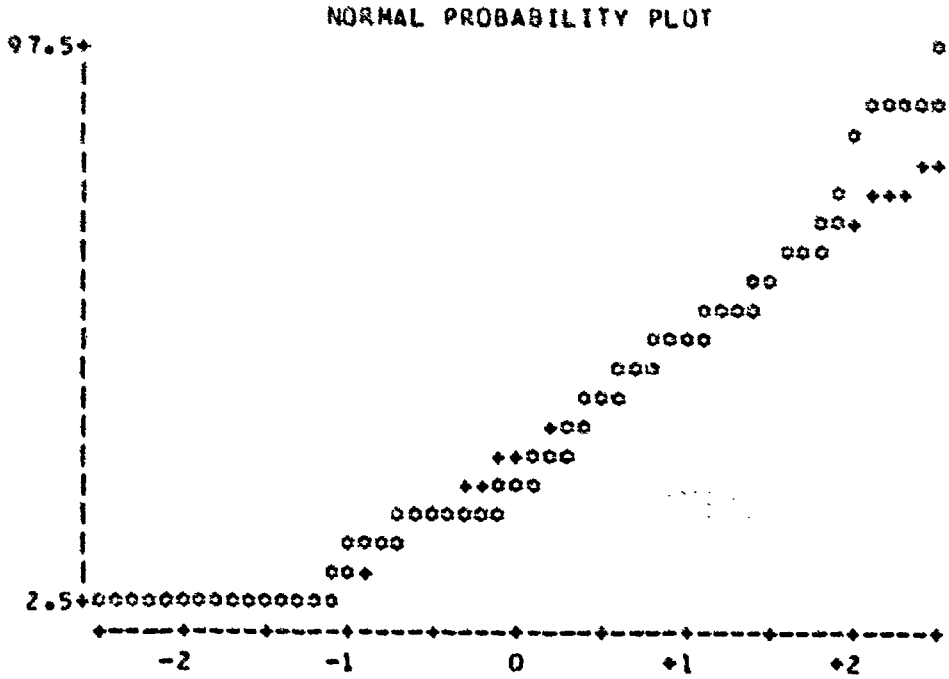
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT





UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	35	14.2	14.2	38.07	2	0.8	73.2
6.08	5	2.0	16.3	40.25	2	0.8	74.0
8.48	1	0.4	16.7	40.38	1	0.4	74.4
10.25	13	5.3	22.0	42.52	5	2.0	76.4
10.44	1	0.4	22.4	43.62	2	0.8	77.2
11.18	2	0.8	23.2	43.78	1	0.4	77.6
12.01	1	0.4	23.6	47.3	1	0.4	78.0
14.6	4	1.6	25.2	47.38	5	2.0	80.1
16.17	13	5.3	30.5	47.44	2	0.8	80.9
17.14	32	13.0	43.5	48.61	9	3.7	84.6
18.24	4	1.6	45.1	48.73	1	0.4	85.0
23.17	6	2.4	47.6	49.08	3	1.2	86.2
23.23	16	6.5	54.1	51.03	1	0.4	86.6
23.4	3	1.2	55.3	51.58	6	2.4	89.0
25.37	2	0.8	56.1	51.69	1	0.4	89.4
25.78	6	2.4	58.5	52.25	5	2.0	91.5
25.99	2	0.8	59.3	57.78	1	0.4	91.9
26.97	2	0.8	60.2	59.38	5	2.0	93.9
31.78	12	4.9	65.0	60.77	6	2.4	96.3
32.4	1	0.4	65.4	69.71	1	0.4	96.7
35.17	1	0.4	65.9	69.94	1	0.4	97.2
35.39	9	3.7	69.5	72.58	1	0.4	97.6
36.24	3	1.2	70.7	81.76	1	0.4	98.0
36.86	1	0.4	71.1	87.51	1	0.4	98.4
37	1	0.4	71.5	88.96	3	1.2	99.6
37.9	2	0.8	72.4	99.51	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	36.5228	SUM	8984.61
STD DEV	22.5212	VARIANCE	507.204
SKEWNESS	0.406227	KURTOSIS	-0.251689
USS	452408	CSS	124265
CV	61.6633	STD MEAN	1.4359
T:MEAN=0	25.4355	PROB>|T|	0.0001
SGN RANK	13053	PROB>|S|	0.0001
NUM ¬= 0	228		
D:NORMAL	0.109485	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	92.6073
75% Q3	51.03	95%	83.25
50% MED	36.24	90%	60.77
25% Q1	17.14	10%	10.25
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	33.89		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	145)	90.83(	121)
0(	145)	91.52(	140)
0(	129)	92.39(	5)
0(	120)	92.8(	24)
0(	101)	99.51(	41)

UNIVARIATE SUMMARY FOR SWAT RATINGS

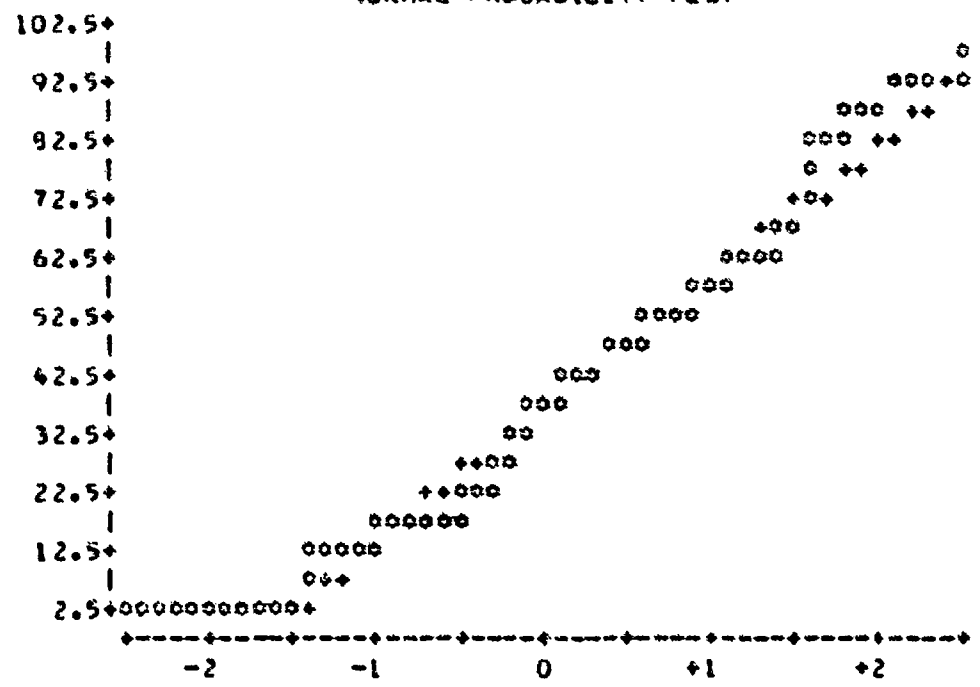
TASK=GR LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

```
STEM LEAF                                                    #    BOXPLOT
  10 0                                                       1       |
   9                                                                 |
   9 1223                                                    4       |
   8 8899                                                    4       |
   8 3344                                                    4       |
   7 9                                                       1       |
   7 0000004                                                 7       |
   6                                                                 |
   6 1111111111113                                          13       |
   5 88888889999999                                         14       |
   5 11111122222222222                                      17       +------+
   4 555577777779999999999999999                            28       |      |
   4 000000223333333444444                                  21       |      |
   3 55555555566666788888                                   20       *---+--*
   3 22222222223                                            11       |      |
   2 56666666666                                            11       |      |
   2 3333333333333334                                       16       |      |
   1 555666666667777777777777777777777777                   39       +------+
   1 00000000000012                                         14              |
   0 666                                                     3              |
   0 000000000000000000                                     18              |
     ----+----+----+----+----+----+----+----
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	18	7.3	7.3	44.56	4	1.6	63.8
6.08	3	1.2	8.5	47.38	7	2.8	66.7
10.25	11	4.5	13.0	48.61	15	6.1	72.3
10.44	1	0.4	13.4	49.08	2	0.8	73.6
11.18	1	0.4	13.8	51.03	5	2.0	75.6
12.01	1	0.4	14.2	51.17	1	0.4	76.0
14.6	3	1.2	15.4	51.58	5	2.0	78.0
16.17	8	3.3	18.7	51.69	1	0.4	78.5
17.14	26	10.6	29.3	52.25	5	2.0	80.5
17.19	2	0.8	30.1	57.78	6	2.4	82.9
23.17	4	1.6	31.7	57.93	1	0.4	83.3
23.23	11	4.5	36.2	58.78	2	0.8	84.1
23.93	1	0.4	36.6	59.38	5	2.0	86.2
25.37	1	0.4	37.0	60.73	1	0.4	86.6
25.59	3	1.2	38.2	60.77	11	4.5	91.1
25.78	7	2.8	41.1	62.62	1	0.4	91.5
31.78	9	3.7	44.7	69.71	2	0.8	92.3
32.4	1	0.4	45.1	69.94	4	1.6	93.9
32.79	1	0.4	45.5	73.62	1	0.4	94.3
35.17	3	1.2	46.7	78.67	1	0.4	94.7
35.39	7	2.8	49.6	83.25	2	0.8	95.5
36.24	5	2.0	51.6	83.62	1	0.4	95.9
36.86	1	0.4	52.0	84.21	1	0.4	96.3
37.9	2	0.8	52.8	87.51	1	0.4	96.7
38.07	2	0.8	53.7	87.84	1	0.4	97.2
40.25	2	0.8	54.5	88.96	2	0.8	99.0
40.38	4	1.6	56.1	90.83	1	0.4	98.4
41.57	2	0.8	56.9	91.52	1	0.4	98.8
42.52	6	2.4	59.3	92.39	1	0.4	99.2
43.44	1	0.4	59.8	92.8	1	0.4	99.6
43.62	1	0.4	60.2	99.51	1	0.4	100.0
43.78	5	2.0	62.2				

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	50.0988	SUM	12324.3
STD DEV	25.8869	VARIANCE	670.129
SKEWNESS	0.185275	KURTOSIS	-0.638894
USS	781614	CSS	164182
CV	51.6716	STD MEAN	1.65049
T:MEAN=0	30.354	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ^= 0	240		
D:NORMAL	0.0660812	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	100
75% Q3	69.93	95%	100
50% MED	49.08	90%	88.176
25% Q1	31.78	10%	17.14
0% MIN	0	5%	10.25
		1%	0
RANGE	100		
Q3-Q1	38.15		
MODE	100		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	145)	100(	121)
0(	145)	100(	125)
0(	129)	100(	140)
0(	120)	100(	140)
0(	34)	100(	143)

UNIVARIATE SUMMARY FOR SWAT RATINGS

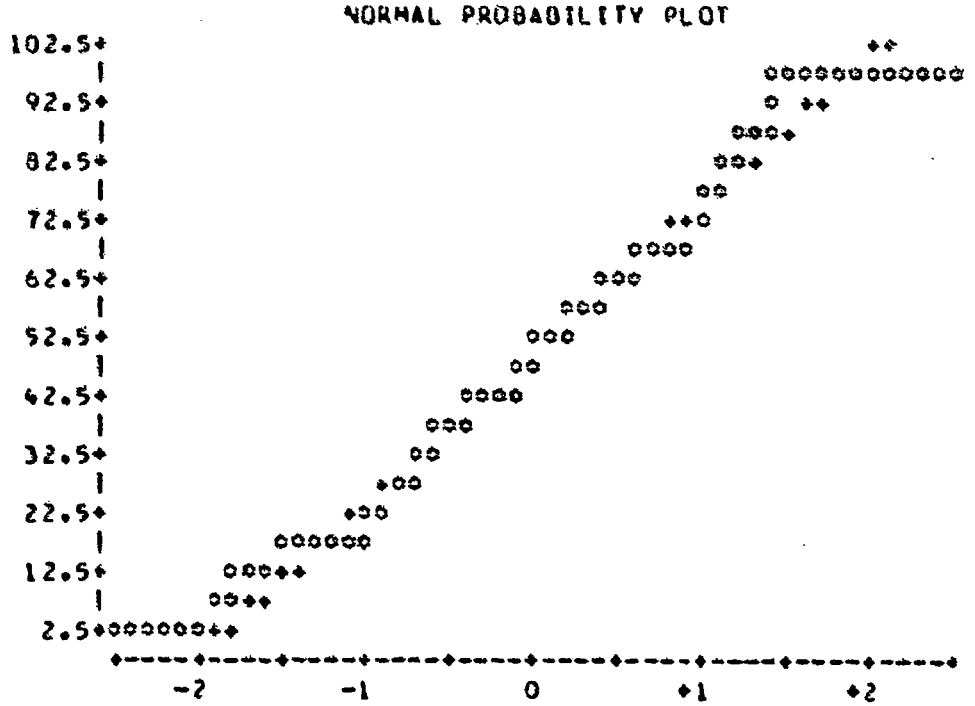
TASK=GR LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

```
STEM LEAF                          #        BOXPLOT
  10 00000000000000000000         19           |
   9                                            |
   9 11                            2           |
   8 88888999                      8           |
   8 123344                        6           |
   7 55799                         5           |
   7 000000000000000000000033     24           |
   6 555556779                     9           +------+
   6 00111134                      8           |      |
   5 888888888888899999999        22           |      |
   5 111111112222222222           19           |  +   |
   4 555555779999999999           19           o------o
   4 000000333333333444444        22           |      |
   3 5555555566667788             16           |      |
   3 2222233                       7           +------+
   2 56666666666                  11                  |
   2 333333344                     9                  |
   1 666666777777777777777779     25                  |
   1 000002                        6                  |
   0 667                           3                  |
   0 000000                        6                  |
     ----+----+----+----+----+
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=GR LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	6	2.4	2.4	50.93	2	0.8	51.2
6.08	2	0.8	3.3	51.03	6	2.4	53.7
7	1	0.4	3.7	51.58	5	2.0	55.7
10.25	5	2.0	5.7	51.69	2	0.8	56.5
12.01	1	0.4	6.1	52.25	4	1.6	58.1
16.17	6	2.4	8.5	57.78	11	4.5	62.6
17.14	15	6.1	14.6	57.93	3	1.2	63.8
17.19	2	0.8	15.4	58.78	3	1.2	65.0
17.45	1	0.4	15.9	58.87	1	0.4	65.4
19	1	0.4	16.3	59.38	4	1.6	67.1
23.17	3	1.2	17.5	60.16	2	0.8	67.9
23.23	4	1.6	19.1	60.77	4	1.6	69.5
23.93	2	0.8	19.9	62.62	1	0.4	69.9
25.37	1	0.4	20.3	63.58	1	0.4	70.3
25.59	2	0.8	21.1	64.87	5	2.0	72.4
25.78	7	2.8	24.0	66.42	1	0.4	72.8
26.31	1	0.4	24.4	66.67	2	0.8	73.6
31.78	4	1.6	26.0	68.63	1	0.4	74.0
32.4	1	0.4	26.4	69.71	1	0.4	74.4
32.79	2	0.8	27.2	69.82	1	0.4	74.8
35.17	3	1.2	28.5	69.93	4	1.6	76.4
35.39	5	2.0	30.5	69.94	16	6.5	82.9
36.24	4	1.6	32.1	72.58	2	0.8	83.7
36.63	1	0.4	32.5	75.14	2	0.8	84.6
36.86	1	0.4	32.9	76.96	1	0.4	85.0
37.9	1	0.4	33.3	78.67	1	0.4	85.4
38.07	1	0.4	33.7	79.37	1	0.4	85.8
40.25	2	0.8	34.6	80.51	1	0.4	86.2
40.28	1	0.4	35.0	81.76	1	0.4	86.6
40.38	3	1.2	36.2	83.25	2	0.8	87.4
42.52	9	3.7	39.8	83.62	1	0.4	87.8
43.44	1	0.4	40.2	84.21	1	0.4	88.2
43.62	1	0.4	40.7	87.51	2	0.8	89.0
43.78	4	1.6	42.3	87.84	3	1.2	90.2
43.83	1	0.4	42.7	88.96	3	1.2	91.5
44.56	6	2.4	45.1	90.83	2	0.8	92.3
47.38	3	1.2	46.3	99.51	2	0.8	93.1
48.61	8	3.3	49.6	100	17	6.9	100.0
49.08	2	0.8	50.4				

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=IP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	7.39337	SUM	1818.77
STD DEV	14.2122	VARIANCE	201.988
SKEWNESS	2.25749	KURTOSIS	5.26576
USS	62933.8	CSS	49487
CV	192.229	STD MEAN	0.906139
T:MEAN=0	8.1592	PROB>|T|	0.0001
SGN RANK	1278	PROB>|S|	0.0001
NUM ^= 0	71		
D:NORMAL	0.409924	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	81.76	99%	57.4208
75% Q3	12.01	95%	42.9685
50% MED	0	90%	25.99
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	81.76		
Q3-Q1	12.01		
MODE	0		

EXTREMES

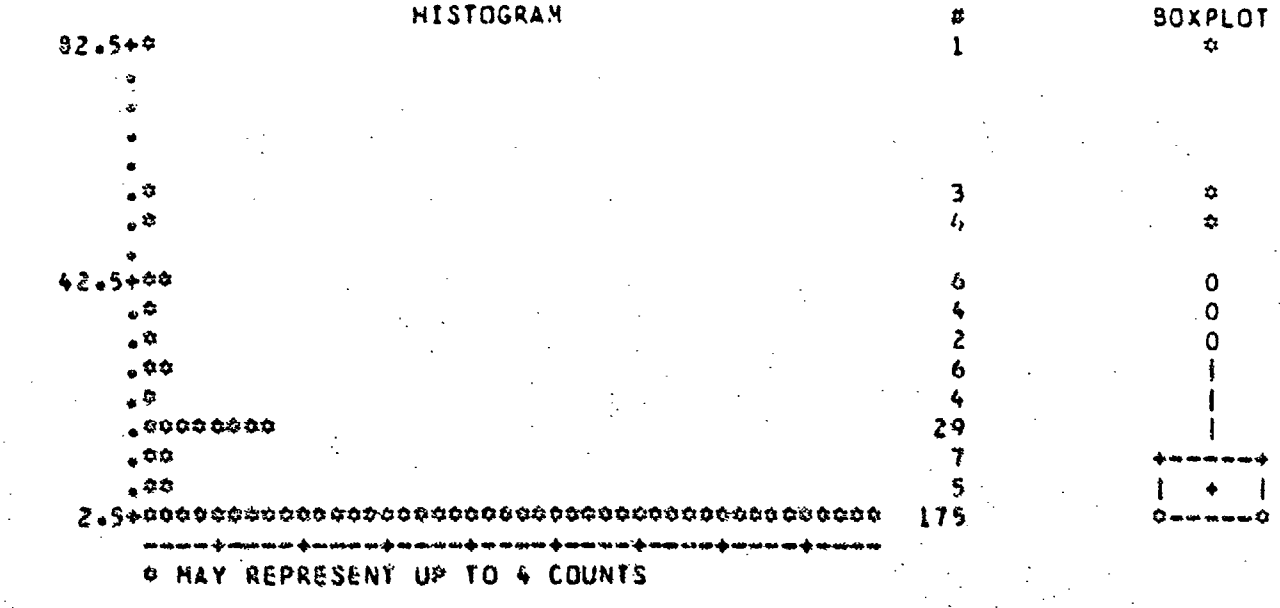
LOWEST	ID	HIGHEST	ID
0(	148)	53.79(	41)
0(	148)	55.43(	111)
0(	146)	56.17(	102)
0(	145)	58.53(	18)
0(	145)	81.76(	66)

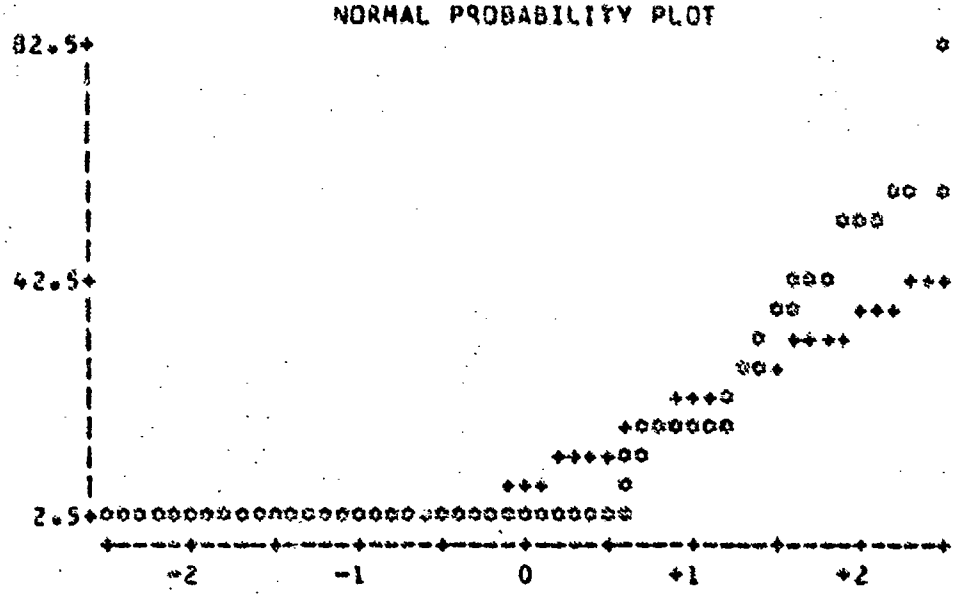
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=IP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=IP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	175	71.1	71.1	27.63	1	0.4	91.9
6.08	2	0.8	72.0	34.48	2	0.8	92.7
8.48	3	1.2	73.2	35.39	2	0.8	93.5
10.25	2	0.8	74.0	36.24	1	0.4	93.9
11.18	1	0.4	74.4	37.9	1	0.4	94.3
12.01	3	1.2	75.6	40.59	1	0.4	94.7
14.6	1	0.4	76.0	42.52	1	0.4	95.1
15.34	1	0.4	76.4	43.21	1	0.4	95.5
16.17	3	1.2	77.6	43.62	2	0.8	96.3
16.96	4	1.6	79.3	43.78	1	0.4	96.7
17.14	5	2.0	81.3	51.69	1	0.4	97.2
18.24	12	4.9	86.2	52.37	1	0.4	97.6
19	4	1.6	87.8	53.79	2	0.8	98.4
23.23	4	1.6	89.4	55.43	1	0.4	98.8
25.37	1	0.4	89.8	56.17	1	0.4	99.2
25.99	2	0.8	90.7	58.53	1	0.4	99.6
26.97	2	0.8	91.5	81.76	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	11.6561	SUM	2867.4
STD DEV	15.9659	VARIANCE	254.909
SKEWNESS	1.71025	KURTOSIS	3.3328
USS	95875.4	CSS	62452.7
CV	136.974	STD MEAN	1.01795
T:MEAN=0	11.4506	PROB>|T|	0.0001
SGN RANK	3813	PROB>|S|	0.0001
NUM ¬= 0	123		
D:NORMAL	0.267324	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	87.51	99%	71.8141
75% Q3	18.24	95%	43.62
50% MED	3.04	90%	35.17
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	87.51		
Q3-Q1	18.24		
MODE	0		

EXTREMES

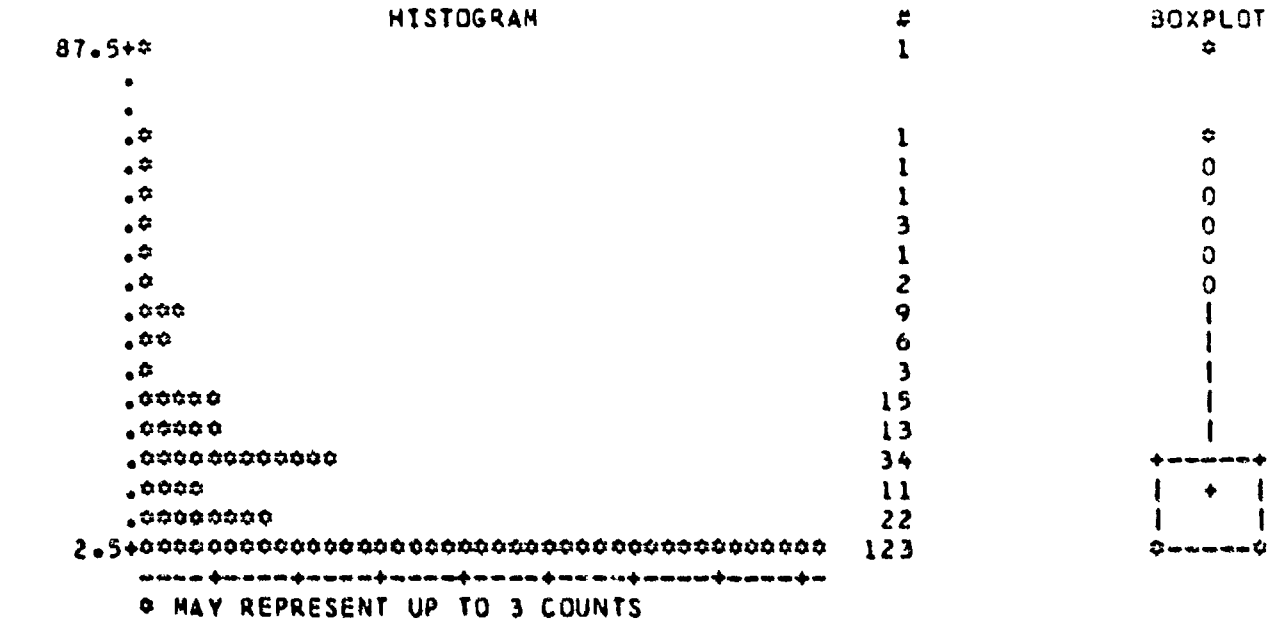
LOWEST	ID	HIGHEST	ID
0(	146)	59.38(	55)
0(	146)	62.62(	102)
0(	145)	69.71(	18)
0(	145)	73.68(	111)
0(	144)	87.51(	41)

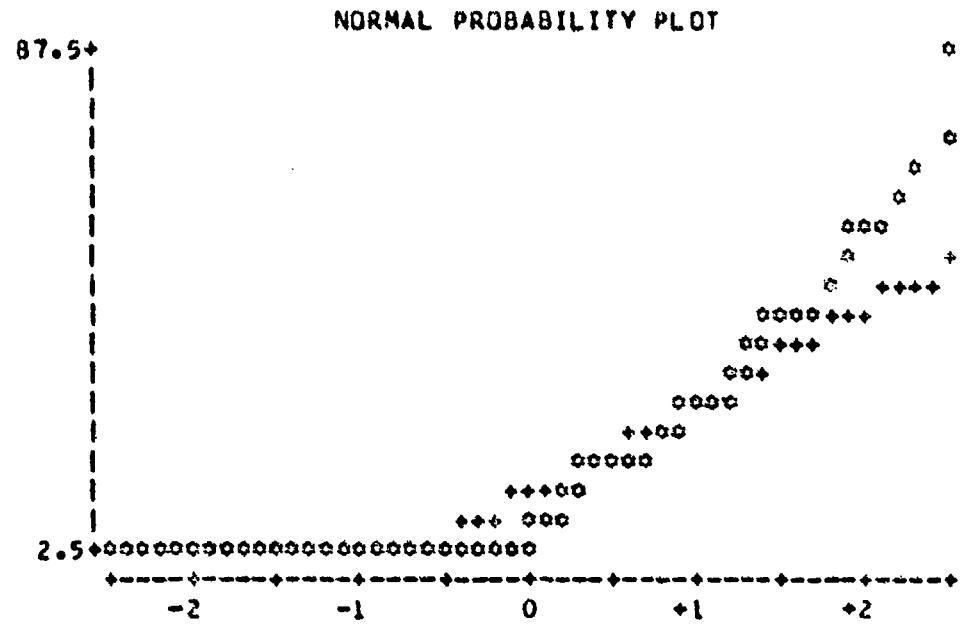
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT





UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	123	50.0	50.0	25.99	6	2.4	87.8
6.08	14	5.7	55.7	26.97	2	0.8	88.6
7	3	1.2	56.9	31.78	3	1.2	89.8
8.48	3	1.2	58.1	35.17	3	1.2	91.1
8.9	2	0.8	58.9	35.39	2	0.8	91.9
10.25	5	2.0	61.0	36.63	1	0.4	92.3
11.18	2	0.8	61.8	40.25	1	0.4	92.7
14.6	4	1.6	63.4	40.38	1	0.4	93.1
15.34	1	0.4	63.8	41.57	1	0.4	93.5
16.17	4	1.6	65.4	42.52	2	0.8	94.3
16.96	2	0.8	66.3	43.21	1	0.4	94.7
17.14	12	4.9	71.1	43.62	3	1.2	95.9
18.24	13	5.3	76.4	47.38	1	0.4	96.3
19	2	0.8	77.2	48.61	1	0.4	96.7
20.48	1	0.4	77.6	52.25	1	0.4	97.2
23.17	3	1.2	78.9	56.17	2	0.8	98.0
23.23	5	2.0	80.9	59.38	1	0.4	98.4
23.4	3	1.2	82.1	62.62	1	0.4	98.8
24.21	1	0.4	82.5	69.71	1	0.4	99.2
25.37	6	2.4	85.0	73.68	1	0.4	99.6
25.59	1	0.4	85.4	87.51	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	22.802	SUM	5609.3
STD DEV	19.4846	VARIANCE	379.648
SKEWNESS	0.676804	KURTOSIS	-0.0482192
USS	220917	CSS	93013.7
CV	85.451	STD MEAN	1.24229
T:MEAN=0	18.3548	PROB>|T|	0.0001
SGN RANK	8695.5	PROB>|S|	0.0001
NUM ¬= 0	186		
D:NORMAL	0.129146	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	90.83	99%	79.144
75% Q3	37.9	95%	59.38
50% MED	17.845	90%	51.03
25% Q1	6.08	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	90.83		
Q3-Q1	31.82		
MODE	0		

EXTREMES

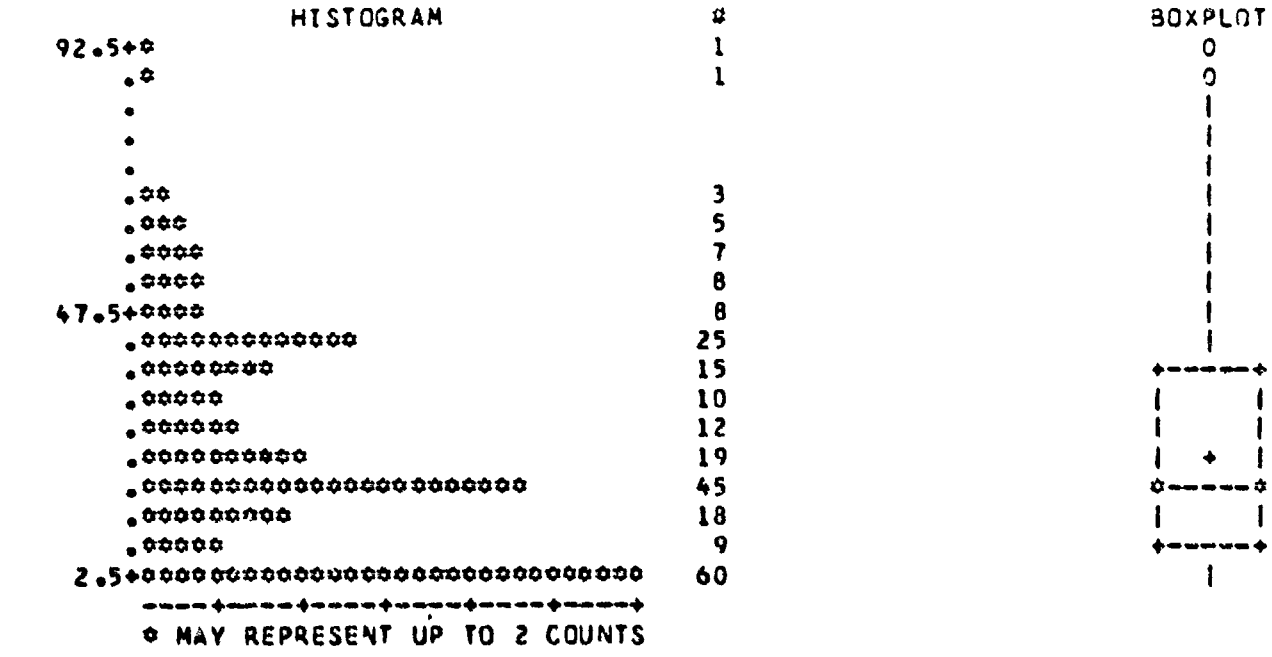
LOWEST	ID	HIGHEST	ID
0(	146)	66.42(	119)
0(	144)	66.42(	119)
0(	144)	69.71(	18)
0(	143)	87.51(	41)
0(	137)	90.83(	114)

UNIVARIATE SUMMARY FOR SWAT RATINGS

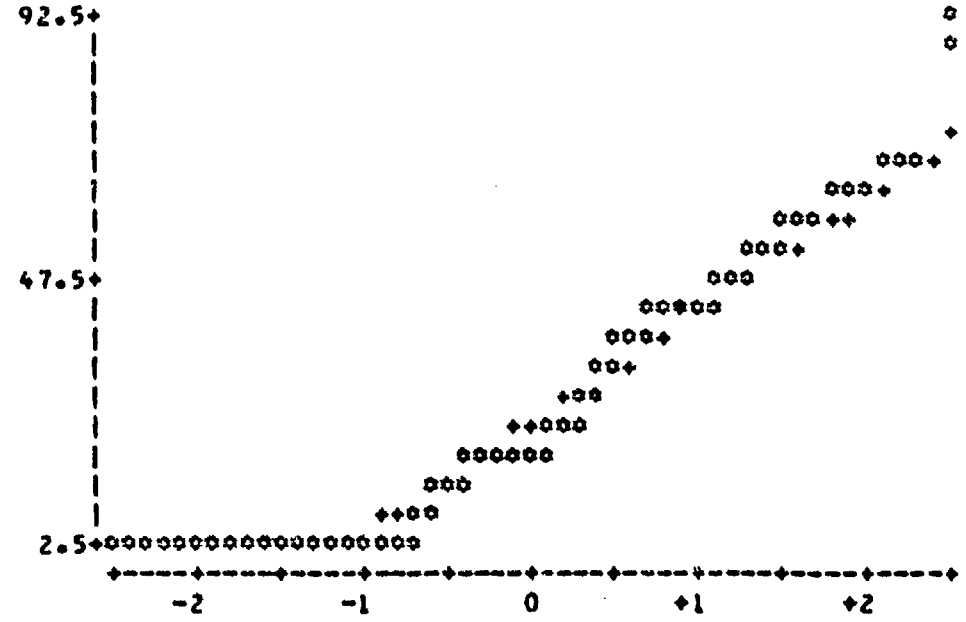
TASK=LP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT



NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	60	24.4	24.4	36.24	3	1.2	74.4
6.08	4	1.6	26.0	36.86	1	0.4	74.8
7	3	1.2	27.2	37.9	3	1.2	76.0
8.48	1	0.4	27.6	38.07	1	0.4	76.4
8.9	1	0.4	28.0	40.25	3	1.2	77.6
10.25	10	4.1	32.1	40.38	4	1.6	79.3
10.44	1	0.4	32.5	41.57	2	0.8	80.1
12.01	1	0.4	32.9	42.52	9	3.7	83.7
14.6	6	2.4	35.4	43.21	1	0.4	84.1
16.17	8	3.3	38.6	43.44	1	0.4	84.6
17.14	27	11.0	49.6	43.62	3	1.2	85.8
17.45	1	0.4	50.0	43.78	2	0.8	86.6
18.24	9	3.7	53.7	47.38	3	1.2	87.8
20.48	1	0.4	54.1	47.44	1	0.4	88.2
23.17	3	1.2	55.3	48.61	2	0.8	89.0
23.23	13	5.3	60.6	48.73	2	0.8	89.8
23.4	2	0.8	61.4	51.03	2	0.8	90.7
25.37	3	1.2	62.6	51.58	3	1.2	91.9
25.59	3	1.2	63.8	52.25	2	0.8	92.7
25.78	2	0.8	64.6	52.37	1	0.4	93.1
25.99	2	0.8	65.4	57.78	3	1.2	94.3
26.38	1	0.4	65.9	57.93	1	0.4	94.7
26.97	1	0.4	66.3	59.38	3	1.2	95.9
31.21	1	0.4	66.7	60.77	5	2.0	98.0
31.78	7	2.8	69.5	66.42	2	0.8	98.8
33.72	1	0.4	69.9	69.71	1	0.4	99.2
34.48	1	0.4	70.3	87.51	1	0.4	99.6
35.17	2	0.8	71.1	90.83	1	0.4	100.0
35.39	5	2.0	73.2				

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	27.5119	SUM	6767.92
STD DEV	20.0385	VARIANCE	401.539
SKEWNESS	0.751452	KURTOSIS	0.318695
USS	284575	CSS	98377.2
CV	72.8357	STD MEAN	1.2776
T:MEAN=0	21.5339	PROB>|T|	0.0001
SGN RANK	11610	PROB>|S|	0.0001
NUM ¬= 0	215		
D:NORMAL	0.145691	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	85.959
75% Q3	40.915	95%	64.4425
50% MED	23.23	90%	52.25
25% Q1	15.34	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	100		
Q3-Q1	25.575		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	141)	75.14(	125)
0(	141)	82.09(	5)
0(	129)	84.21(	18)
0(	120)	87.51(	41)
0(	112)	100(	102)

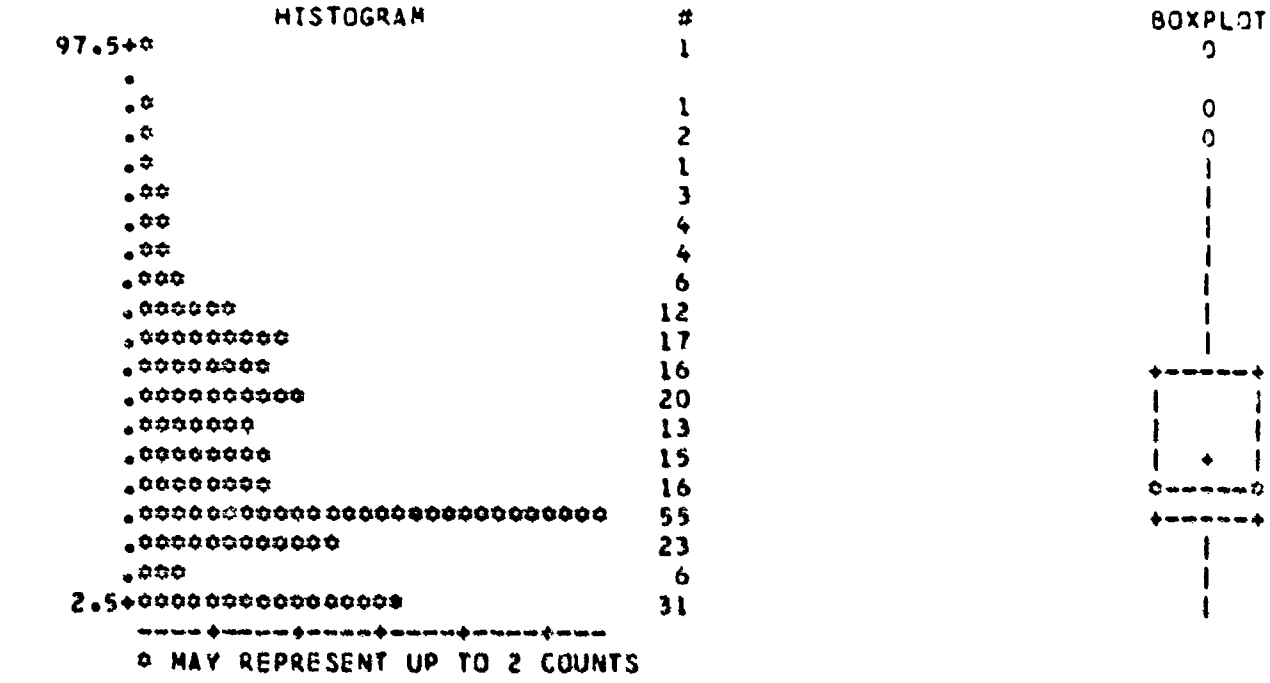
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

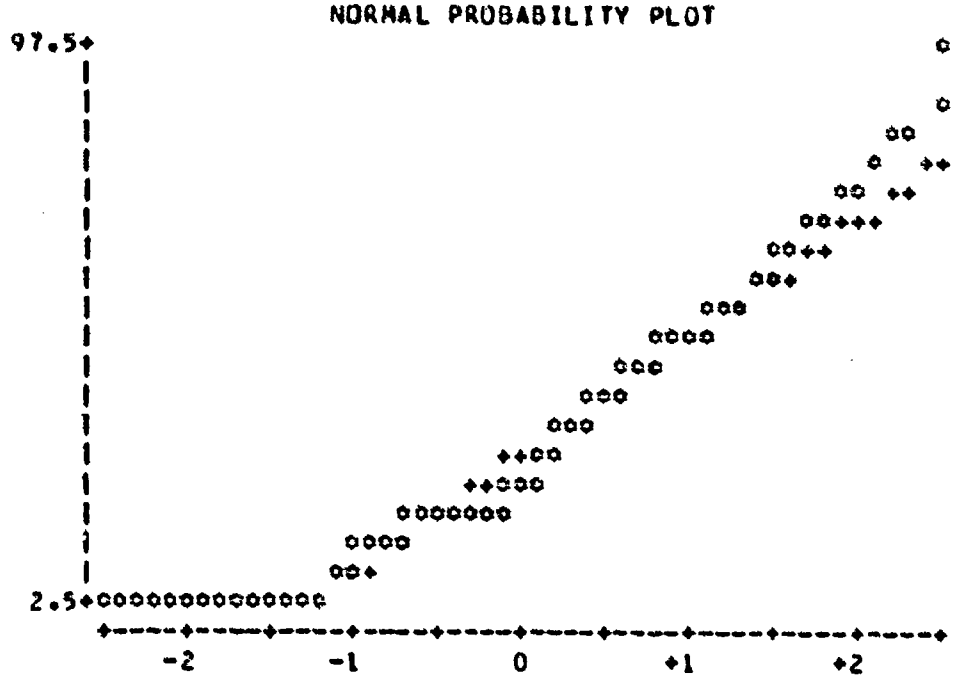
TASK=LP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=LP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	31	12.6	12.6	37.9	2	0.8	72.8
6.08	2	0.8	13.4	40.25	2	0.8	73.6
7	3	1.2	14.6	40.38	4	1.6	75.2
8.48	1	0.4	15.0	42.52	4	1.6	76.8
10.25	13	5.3	20.3	43.21	1	0.4	77.2
10.44	1	0.4	20.7	43.62	1	0.4	77.6
11.18	2	0.8	21.5	43.78	3	1.2	78.9
12.01	1	0.4	22.0	44.56	1	0.4	79.3
14.6	6	2.4	24.4	47.38	5	2.0	81.3
15.34	2	0.8	25.2	47.44	1	0.4	81.7
16.17	9	3.7	28.9	48.61	10	4.1	85.8
17.14	36	14.6	43.5	49.08	1	0.4	86.2
17.19	1	0.4	43.9	50.93	1	0.4	86.6
17.45	1	0.4	44.3	51.03	3	1.2	87.8
18.24	6	2.4	46.7	51.58	2	0.8	88.6
23.17	5	2.0	48.8	51.69	2	0.8	89.4
23.23	7	2.8	51.6	52.25	4	1.6	91.1
23.4	4	1.6	53.3	57.78	3	1.2	92.3
25.37	4	1.6	54.9	59.38	3	1.2	93.5
25.59	4	1.6	56.5	60.77	4	1.6	95.1
25.78	4	1.6	58.1	66.42	1	0.4	95.5
25.99	2	0.8	58.9	69.68	1	0.4	95.9
26.97	1	0.4	59.3	69.71	1	0.4	96.3
31.21	1	0.4	59.8	69.94	1	0.4	96.7
31.78	9	3.7	63.4	71.62	1	0.4	97.2
32.4	3	1.2	64.6	73.62	2	0.8	98.0
35.17	2	0.8	65.4	75.14	1	0.4	98.4
35.39	10	4.1	69.5	82.09	1	0.4	98.8
36.24	4	1.6	71.1	84.21	1	0.4	99.2
36.86	1	0.4	71.5	87.51	1	0.4	99.6
37	1	0.4	72.0	100	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	11.9994	SUM	2951.85
STD DEV	15.994	VARIANCE	255.809
SKEWNESS	1.78691	KURTOSIS	3.6604°
USS	98093.7	CSS	62673.3
CV	133.29	STD MEAN	1.01974
T:MEAN=0	11.7671	PROB>|T|	0.0001
SGN RANK	4323	PROB>|S|	0.0001
NUM ¬= 0	131		
D:NORMAL	0.240925	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	87.51	99%	69.71
75% Q3	18.24	95%	48.1795
50% MED	6.08	90%	31.78
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	87.51		
Q3-Q1	18.24		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	146)	66.42(	119)
0(	146)	66.42(	119)
0(	145)	69.71(	18)
0(	145)	69.71(	18)
0(	144)	87.51(	41)

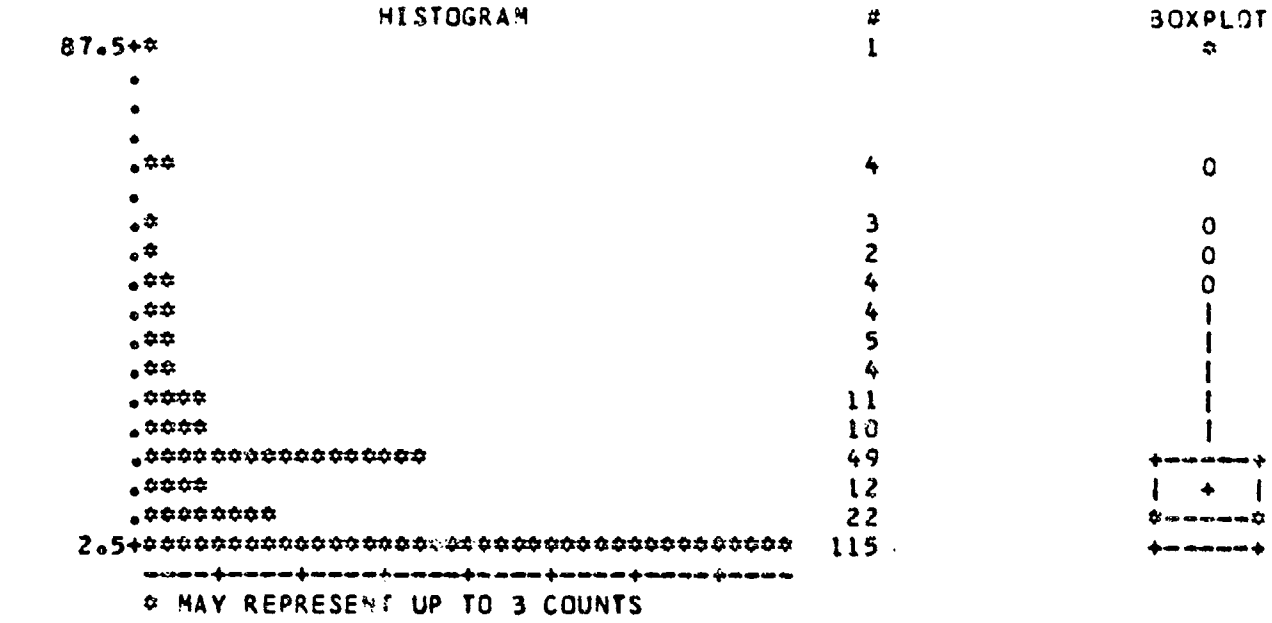
USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

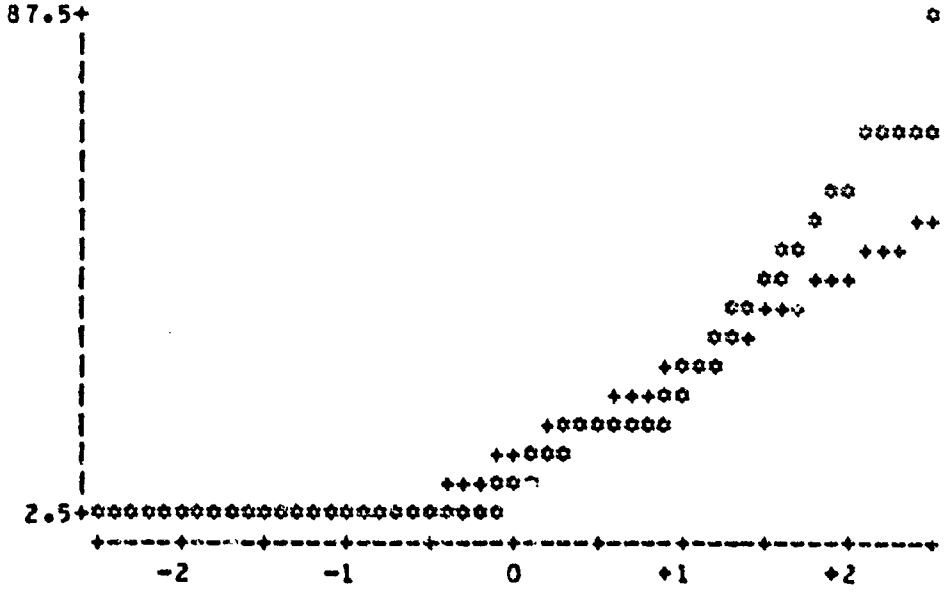
TASK=MP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT



NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	115	46.7	46.7	25.78	1	0.4	86.2
5.08	13	5.3	52.0	25.99	5	2.0	88.2
7	5	2.0	54.1	26.97	2	0.8	89.0
8.48	2	0.8	54.9	31.78	4	1.6	90.7
8.9	2	0.8	55.7	35.17	2	0.8	91.5
10.25	5	2.0	57.7	35.39	2	0.8	92.3
10.44	3	1.2	58.9	36.86	1	0.4	92.7
11.18	2	0.8	59.8	40.25	2	0.8	93.5
14.6	2	0.8	60.6	41.33	1	0.4	93.9
15.34	1	0.4	61.0	43.62	1	0.4	94.3
16.17	7	2.8	63.8	47.38	2	0.8	95.1
16.96	2	0.8	64.6	48.61	2	0.8	95.9
17.14	19	7.7	72.4	51.03	1	0.4	96.3
18.24	19	7.7	80.1	52.25	1	0.4	96.7
19	1	0.4	80.5	56.17	2	0.8	97.6
23.17	5	2.0	82.5	59.38	1	0.4	98.0
23.23	4	1.6	84.1	66.42	2	0.8	98.8
23.4	1	0.4	84.6	69.71	2	0.8	99.6
25.37	3	1.2	85.8	87.51	1	0.4	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	245	SUM WGTS	245
MEAN	23.0109	SUM	5637.66
STD DEV	18.93	VARIANCE	358.345
SKEWNESS	0.964449	KURTOSIS	1.21403
USS	217164	CSS	87436.2
CV	82.2655	STD MEAN	1.20939
T:MEAN=0	19.0268	PROB>|T|	0.0001
SGN RANK	9751.5	PROB>|S|	0.0001
NUM ¬= 0	197		
D:NORMAL	0.116288	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	85.992
75% Q3	35.39	95%	60.353
50% MED	18.24	90%	48.61
25% Q1	10.25	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	25.14		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	146)	73.62(	119)
0(	146)	78.67(	147)
0(	145)	84.21(	18)
0(	145)	87.51(	41)
0(	143)	99.51(	41)

MISSING VALUE	.
COUNT	1
% COUNT/NOBS	0.41

UNIVARIATE SUMMARY FOR SWAT RATINGS

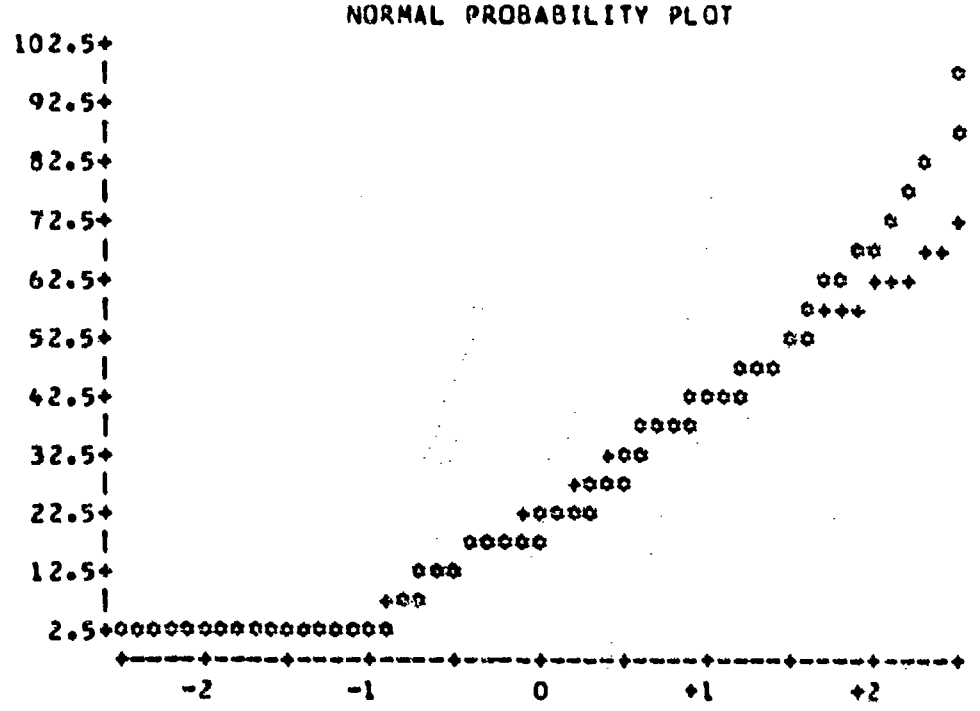
TASK=MP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

```
STEM LEAF                                                          #          BOXPLOT
  10 0                                                             1
   9                                                                            0
   9
   8 8                                                             1          0
   8 4                                                             1          0
   7 9                                                             1          0
   7 04                                                            2          0
   6 66                                                            2          |
   6 1113                                                          4          |
   5 69                                                            2          |
   5 1222                                                          4          |
   4 77779999999                                                   11         |
   4 0000002233344444                                              16         |
   3 5555555555555566667788                                        23       +---+
   3 12222222222                                                   11       |   |
   2 5666666666678                                                 13       |   |
   2 333333333333333333333333333                                   29       |  +|
   1 556666666666677777777777777777777777777788888                46       *---*
   1 00000000000000001122                                          20       +---+
   0 6666667788                                                    10           |
   0 000000000000000000000000000000000000000000000000              48           |
     ----+----+----+----+----+----+----+----+----+----+---
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	48	19.6	19.6	36.86	1	0.4	80.4
6.08	6	2.4	22.0	37	1	0.4	80.8
7	2	0.8	22.9	37.9	2	0.8	81.6
8.48	2	0.8	23.7	40.25	3	1.2	82.9
10.25	15	6.1	29.8	40.38	3	1.2	84.1
10.44	1	0.4	30.2	41.57	2	0.8	84.9
11.18	2	0.8	31.0	42.52	3	1.2	86.1
12.01	2	0.8	31.8	43.62	1	0.4	86.5
14.6	2	0.8	32.7	43.78	4	1.6	88.2
16.17	11	4.5	37.1	47.3	1	0.4	88.6
17.14	27	11.0	48.2	47.38	1	0.4	89.0
17.19	1	0.4	48.6	47.44	2	0.8	89.8
18.24	5	2.0	50.6	48.61	5	2.0	91.8
23.17	9	3.7	54.3	48.73	2	0.8	92.7
23.23	18	7.3	61.6	51.03	1	0.4	93.1
23.4	2	0.8	62.4	51.58	1	0.4	93.5
25.37	1	0.4	62.9	52.25	2	0.8	94.3
25.59	1	0.4	63.3	56.17	1	0.4	94.7
25.78	6	2.4	65.7	59.38	1	0.4	95.1
25.99	3	1.2	66.9	60.77	3	1.2	96.3
26.72	1	0.4	67.3	62.62	1	0.4	96.7
27.63	1	0.4	67.8	66.42	2	0.8	97.6
31.46	1	0.4	68.2	69.94	1	0.4	98.0
31.78	9	3.7	71.8	73.62	1	0.4	98.4
32.4	1	0.4	72.2	78.67	1	0.4	98.8
35.17	3	1.2	73.5	84.21	1	0.4	99.2
35.39	12	4.9	78.4	87.51	1	0.4	99.6
36.24	4	1.6	80.0	99.51	1	0.4	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	30.6309	SUM	7535.21
STD DEV	21.1578	VARIANCE	447.653
SKEWNESS	0.697544	KURTOSIS	0.155599
USS	340486	CSS	109675
CV	69.0734	STD MEAN	1.34897
T:MEAN=0	22.7069	PROB>|T|	0.0001
SGN RANK	12265.5	PROB>|S|	0.0001
NUM ¬= 0	221		
D:NORMAL	0.119488	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	89.4247
75% Q3	43.78	95%	71.5815
50% MED	25.78	90%	60.77
25% Q1	16.17	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	27.61		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	137)	84.21(	18)
0(	123)	87.51(	41)
0(	120)	87.84(	147)
0(	120)	90.83(	121)
0(	117)	99.51(	41)

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=HIGH

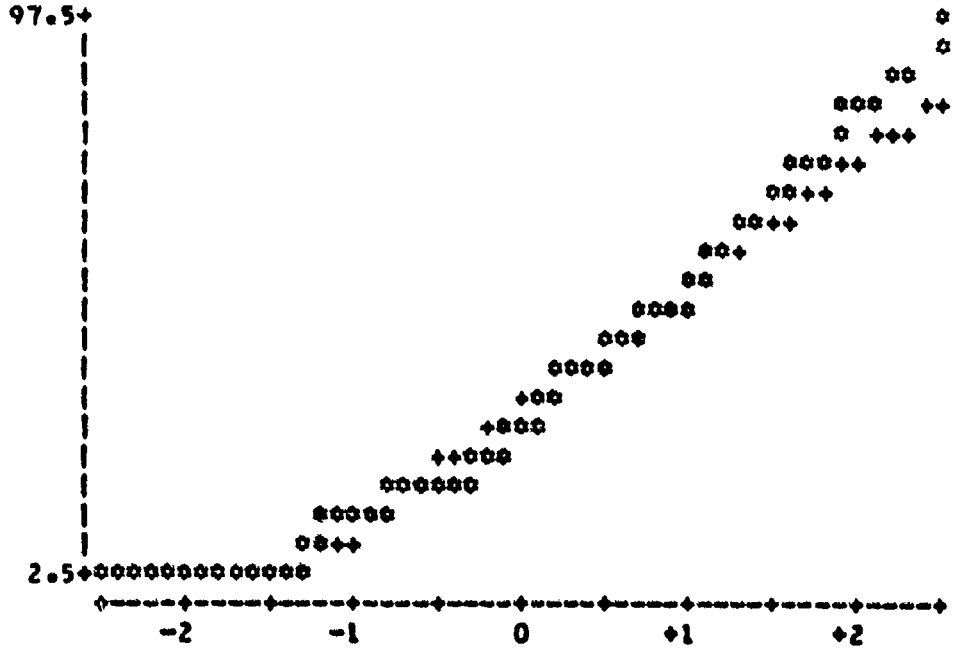
UNIVARIATE

VARIABLE=SWAT

STEM	LEAF	#	BOXPLOT
9		1	0
9		1	0
8		2	0
8		3	|
7		1	|
7		5	|
6		5	|
6		8	|
5		7	|
5		8	|
4		16	|
4		21	+-----+
3		23	| |
3		15	| + |
2		14	*-----*
2		21	| |
1		43	+-----+
1		23	|
0		4	|
0		25	|

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	25	10.2	10.2	43.62	1	0.4	74.8
6.08	2	0.8	11.0	43.78	4	1.6	76.4
7	1	0.4	11.4	44.56	1	0.4	76.8
8.48	1	0.4	11.8	47.38	4	1.6	78.5
10.25	14	5.7	17.5	47.44	2	0.8	79.3
10.44	2	0.8	18.3	48.61	9	3.7	82.9
14.6	7	2.8	21.1	49.08	1	0.4	83.3
16.17	13	5.3	26.4	51.03	4	1.6	85.0
17.14	28	11.4	37.8	51.58	2	0.8	85.8
17.19	1	0.4	38.2	51.69	1	0.4	86.2
18.24	1	0.4	38.6	52.25	1	0.4	86.6
23.17	6	2.4	41.1	56.17	1	0.4	87.0
23.23	14	5.7	46.7	57.78	3	1.2	88.2
23.93	1	0.4	47.2	57.93	2	0.8	89.0
25.37	1	0.4	47.6	59.38	1	0.4	89.4
25.59	3	1.2	48.8	60.16	1	0.4	89.8
25.78	6	2.4	51.2	60.77	6	2.4	92.3
25.99	2	0.8	52.0	61.47	1	0.4	92.7
26.72	2	0.8	52.8	66.42	1	0.4	93.1
31.78	12	4.9	57.7	68.63	2	0.8	93.9
32.4	3	1.2	58.9	69.94	2	0.8	94.7
35.17	3	1.2	60.2	71.51	1	0.4	95.1
35.39	13	5.3	65.4	71.62	1	0.4	95.5
36.24	3	1.2	66.7	73.62	3	1.2	96.7
36.86	1	0.4	67.1	78.67	1	0.4	97.2
37	1	0.4	67.5	80.51	1	0.4	97.6
37.9	2	0.8	68.3	83.62	1	0.4	98.0
40.25	3	1.2	69.5	84.21	1	0.4	98.4
40.38	1	0.4	69.9	87.51	1	0.4	98.8
41.33	1	0.4	70.3	87.84	1	0.4	99.2
41.57	2	0.8	71.1	90.83	1	0.4	99.6
42.52	8	3.3	74.4	99.51	1	0.4	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	7.6528	SUM	1882.59
STD DEV	14.4218	VARIANCE	207.989
SKEWNESS	2.17673	KURTOSIS	4.75355
USS	65364.4	CSS	50957.4
CV	188.452	STD MEAN	0.919502
T:MEAN=0	8.32277	PROB>|T|	0.0001
SGN RANK	1425	PROB>|S|	0.0001
NUM ¬= 0	75		
D:NORMAL	0.397288	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	73.68	99%	65.4503
75% Q3	9.6775	95%	39.512
50% MED	0	90%	25.99
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	73.68		
Q3-Q1	9.6775		
MODE	0		

EXTREMES

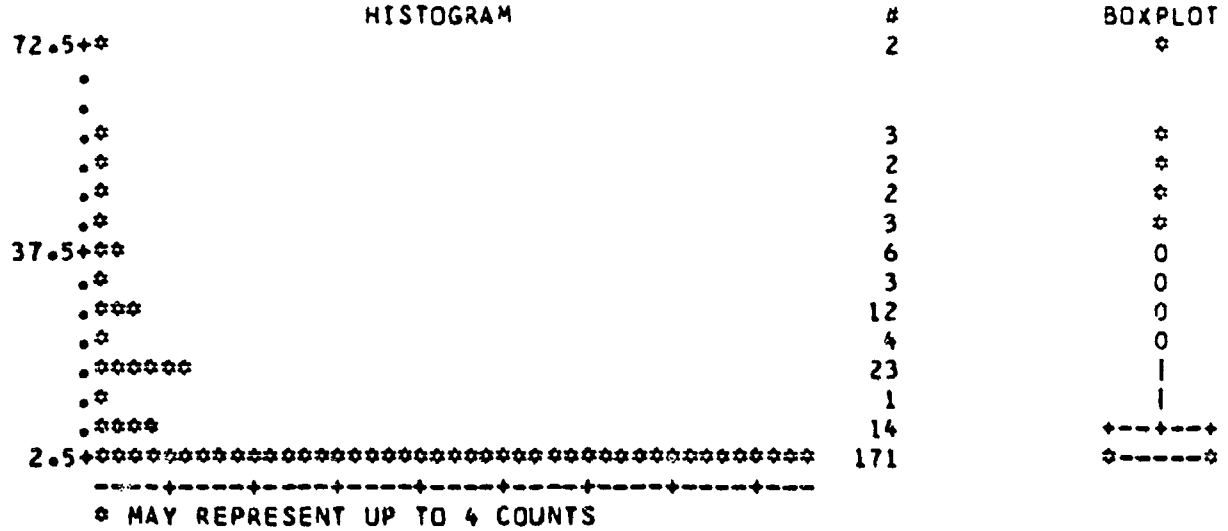
LOWEST	ID	HIGHEST	ID
0(	150)	56.17(	7)
0(	150)	56.17(	119)
0(	148)	56.17(	119)
0(	146)	73.68(	111)
0(	146)	73.68(	111)

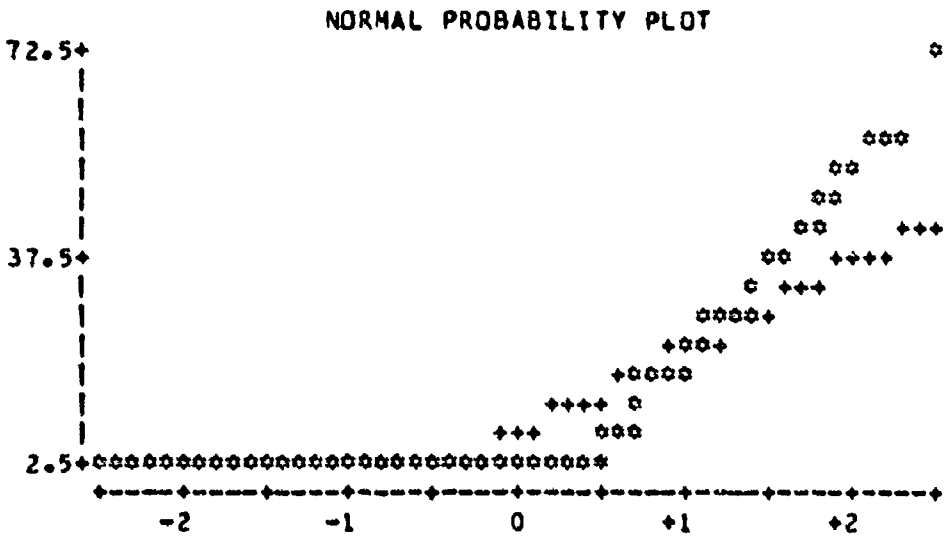
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	171	69.5	69.5	26.97	2	0.8	91.5
6.08	9	3.7	73.2	31.21	1	0.4	91.9
7	1	0.4	73.6	31.46	1	0.4	92.3
8.48	3	1.2	74.8	31.78	1	0.4	92.7
8.9	1	0.4	75.2	35.17	2	0.8	93.5
12.01	1	0.4	75.6	36.24	3	1.2	94.7
16.17	2	0.8	76.4	37.9	1	0.4	95.1
16.96	2	0.8	77.2	40.38	1	0.4	95.5
17.14	3	1.2	78.5	42.52	1	0.4	95.9
18.24	12	4.9	83.3	43.62	1	0.4	96.3
19	4	1.6	85.0	48.61	1	0.4	96.7
23.23	3	1.2	86.2	49.08	1	0.4	97.2
24.21	1	0.4	86.6	52.25	1	0.4	97.6
25.37	5	2.0	88.6	53.79	1	0.4	98.0
25.78	1	0.4	89.0	56.17	3	1.2	99.2
25.99	4	1.6	90.7	73.68	2	0.8	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	14.8322	SUM	3648.71
STD DEV	17.1851	VARIANCE	295.328
SKEWNESS	1.17269	KURTOSIS	0.817003
USS	126474	CSS	72355.4
CV	115.864	STD MEAN	1.09568
T:MEAN=0	13.5369	PROB>|T|	0.0001
SGN RANK	5365.5	PROB>|S|	0.0001
NUM ¬= 0	146		
D:NORMAL	0.212458	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	76.96	99%	69.1177
75% Q3	23.3	95%	48.61
50% MED	9.575	90%	43.21
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	76.96		
Q3-Q1	23.3		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	146)	60.77(	114)
0(	146)	66.42(	7)
0(	145)	66.42(	119)
0(	144)	71.51(	102)
0(	144)	76.96(	41)

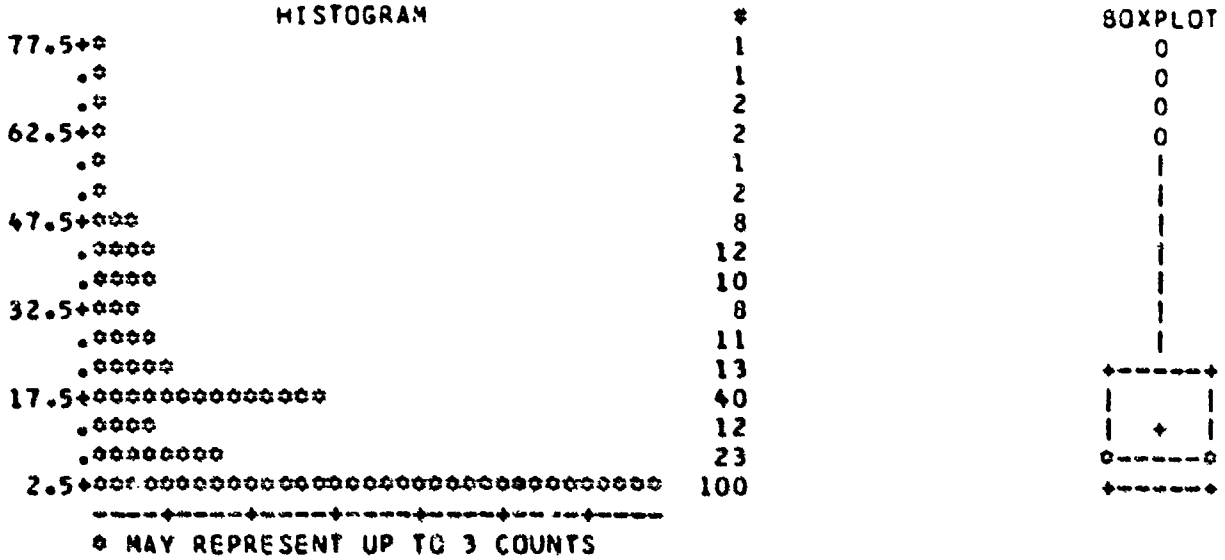
USAF/SCEEE LARGE-SCALE CTS STUDY

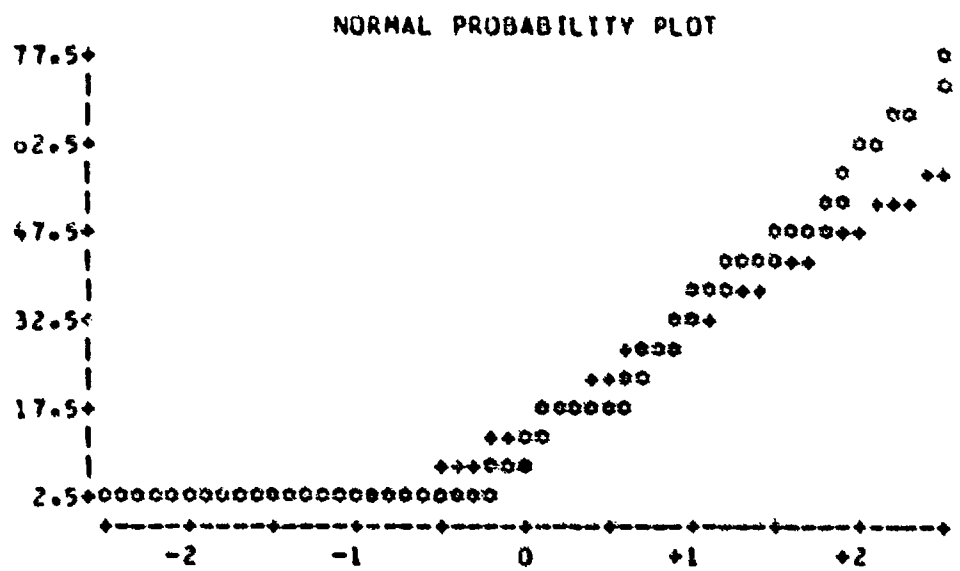
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	100	40.7	40.7	31.78	7	2.8	83.7
6.08	13	5.3	45.9	34.48	1	0.4	84.1
7	3	1.2	47.2	35.17	3	1.2	85.4
8.48	5	2.0	49.2	35.39	5	2.0	87.4
8.9	2	0.8	50.0	36.24	2	0.8	88.2
10.25	7	2.8	52.8	40.38	1	0.4	88.6
10.44	1	0.4	53.3	41.33	1	0.4	89.0
14.6	4	1.6	54.9	42.52	2	0.8	89.8
16.17	12	4.9	59.8	43.21	2	0.8	90.7
17.14	21	8.5	68.3	43.62	4	1.6	92.3
18.24	6	2.4	70.7	43.78	2	0.8	93.1
19	1	0.4	71.1	47.38	2	0.8	93.9
23.17	1	0.4	71.5	48.61	4	1.6	95.5
23.23	7	2.8	74.4	48.73	2	0.8	96.3
23.3	3	1.2	75.6	51.58	1	0.4	96.7
23.4	1	0.4	76.0	52.25	1	0.4	97.2
24.21	1	0.4	76.4	56.17	1	0.4	97.6
25.37	3	1.2	77.6	60.77	2	0.8	98.4
25.78	2	0.8	78.5	66.42	2	0.8	99.2
25.99	4	1.6	80.1	71.51	1	0.4	99.6
26.97	2	0.8	80.9	76.96	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	26.6577	SUM	6557.79
STD DEV	21.1209	VARIANCE	446.091
SKEWNESS	0.731903	KURTOSIS	0.127232
USS	284108	CSS	109292
CV	79.2299	STD MEAN	1.34662
T:MEAN=0	19.796	PROB>|T|	0.0001
SGN RANK	10353	PROB>|S|	0.0001
NUM ¬= 0	203		
D:NORMAL	0.133221	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	87.51
75% Q3	42.52	95%	60.77
50% MED	23.23	90%	58.26
25% Q1	10.25	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	100		
Q3-Q1	32.27		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	137)	81.76(	7)
0(	134)	81.76(	119)
0(	129)	87.51(	41)
0(	117)	87.51(	41)
0(	112)	100(	111)

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=HIGH

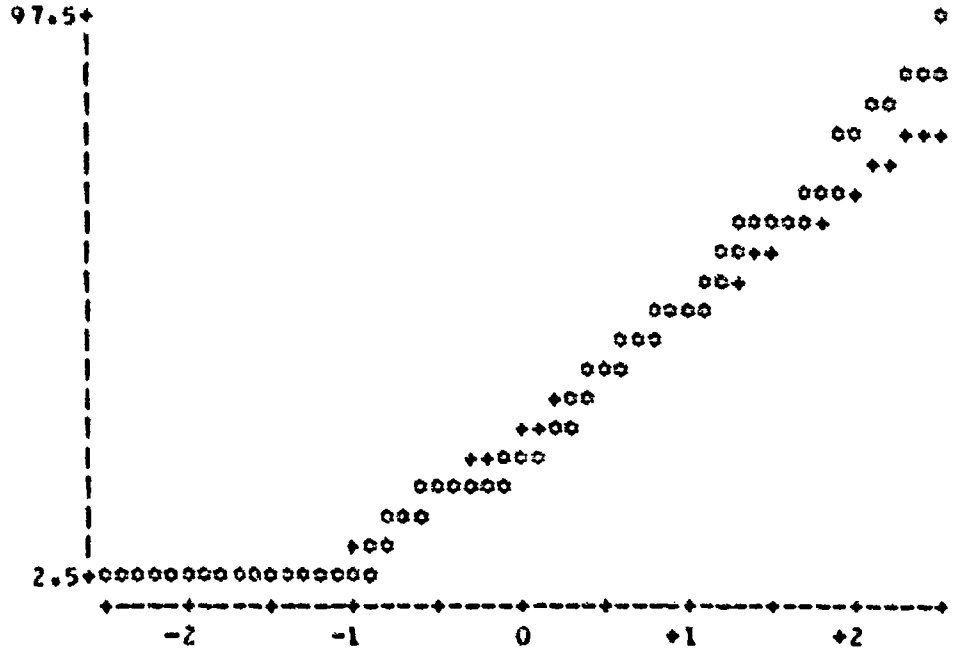
UNIVARIATE

VARIABLE=SWAT

STEM	LEAF	#	BOXPLOT
9		1	0
9			
8		2	|
8		2	|
7		2	|
7			|
6		4	|
6		12	|
5		4	|
5		6	|
4		18	|
4		17	+------+
3		17	| |
3		12	| |
2		11	| + |
2		21	*------*
1		46	| |
1		21	+------+
0		7	|
0		43	|

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=MS LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	43	17.5	17.5	35.39	8	3.3	70.3
6.08	2	0.8	18.3	36.24	2	0.8	71.1
7	2	0.8	19.1	37	2	0.8	72.0
8.48	3	1.2	20.3	37.9	1	0.4	72.4
10.25	12	4.9	25.2	40.25	2	0.8	73.2
10.44	1	0.4	25.6	40.38	3	1.2	74.4
11.18	2	0.8	26.4	41.33	1	0.4	74.8
12.01	1	0.4	26.8	42.52	5	2.0	76.8
14.6	5	2.0	28.9	43.21	1	0.4	77.2
15.34	2	0.8	29.7	43.78	5	2.0	79.3
16.17	12	4.9	34.6	47.38	4	1.6	80.9
17.14	28	11.4	45.9	47.44	2	0.8	81.7
17.45	1	0.4	46.3	48.61	8	3.3	85.0
18.24	3	1.2	47.6	49.08	4	1.6	86.6
23.17	5	2.0	49.6	51.03	1	0.4	87.0
23.23	12	4.9	54.5	51.58	4	1.6	88.6
23.3	2	0.8	55.3	51.69	1	0.4	89.0
23.4	2	0.8	56.1	56.17	1	0.4	89.4
25.37	1	0.4	56.5	57.78	2	0.8	90.2
25.59	2	0.8	57.3	59.38	1	0.4	90.7
25.78	2	0.8	58.1	60.73	2	0.8	91.5
25.99	2	0.8	58.9	60.77	10	4.1	95.5
26.31	1	0.4	59.3	66.42	2	0.8	96.3
26.97	2	0.8	60.2	69.94	2	0.8	97.2
29.1	1	0.4	60.6	75.14	1	0.4	97.6
31.78	10	4.1	64.6	76.96	1	0.4	98.0
32.4	1	0.4	65.0	81.76	2	0.8	98.8
32.79	1	0.4	65.4	87.51	2	0.8	99.6
35.17	4	1.6	67.1	100	1	0.4	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	245	SUM WGTS	245
MEAN	10.7524	SUM	2634.33
STD DEV	17.072	VARIANCE	291.455
SKEWNESS	1.8263	KURTOSIS	2.90063
USS	99440.2	CSS	71114.9
CV	158.775	STD MEAN	1.09069
T:MEAN=0	9.85829	PROB>|T|	0.0001
SGN RANK	2626.5	PROB>|S|	0.0001
NUM ¬= 0	102		
D:NORMAL	0.319268	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	81.76	99%	69.93
75% Q3	17.14	95%	51.58
50% MED	0	90%	36.034
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	81.76		
Q3-Q1	17.14		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	148)	60.77(	44)
0(	147)	68.63(	138)
0(	146)	69.93(	27)
0(	146)	69.93(	27)
0(	145)	81.76(	24)

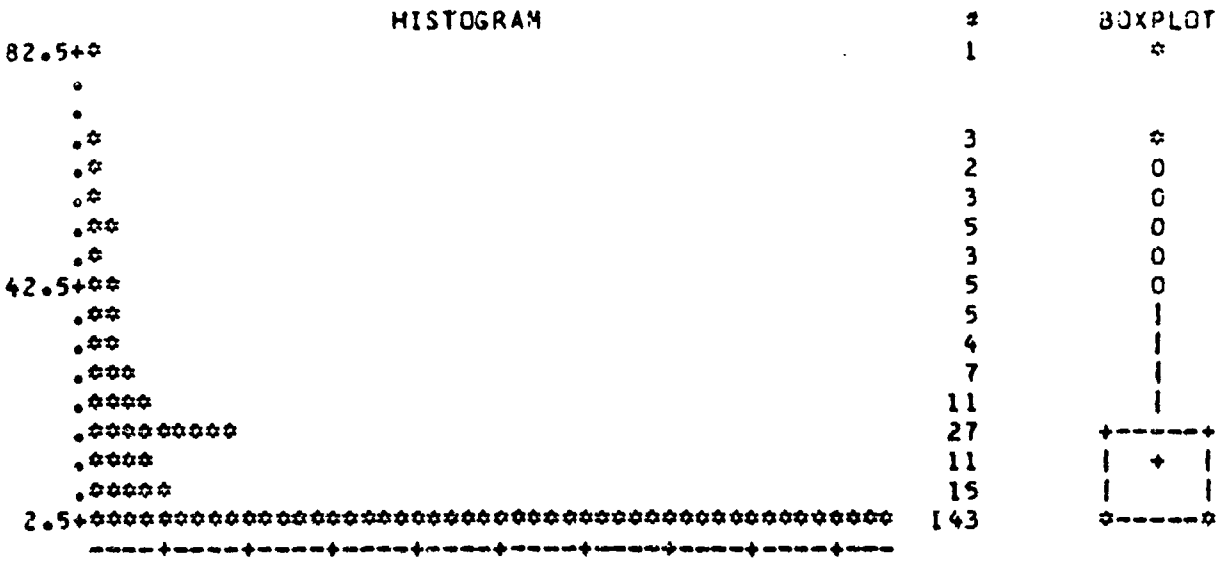
MISSING VALUE	.
COUNT	1
% COUNT/NOBS	0.41

UNIVARIATE SUMMARY FOR SWAT RATINGS

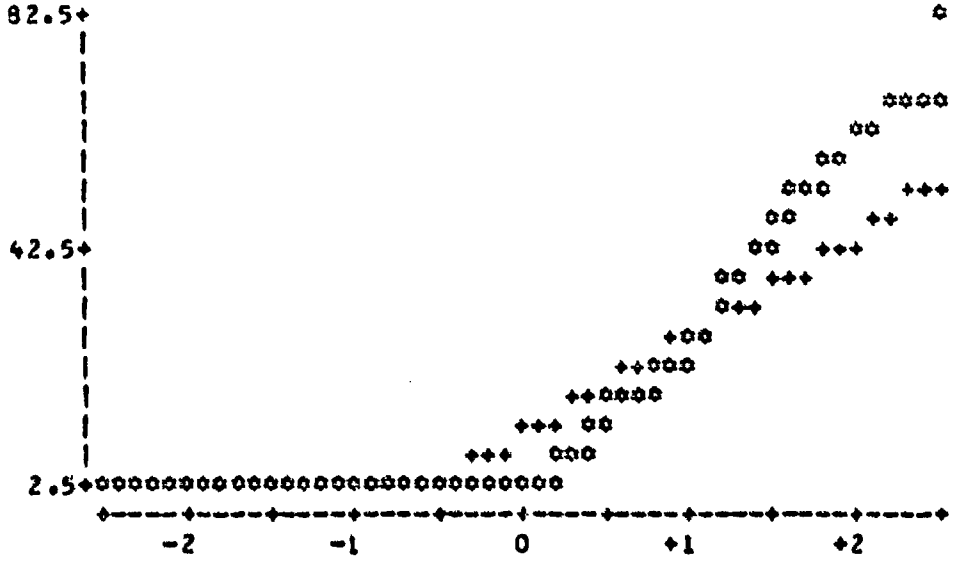
TASK=PM LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT



NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
0	143	58.4	58.4
6.08	10	4.1	62.4
7	1	0.4	62.9
8.48	4	1.6	64.5
10.25	7	2.9	67.3
11.18	3	1.2	68.6
14.6	1	0.4	69.0
16.17	6	2.4	71.4
17.14	14	5.7	77.1
18.24	6	2.4	79.6
19	1	0.4	80.0
20.48	1	0.4	80.4
23.17	2	0.8	81.2
23.23	3	1.2	82.4
23.4	2	0.8	83.3
23.93	2	0.8	84.1
24.21	1	0.4	84.5
25.37	3	1.2	85.7
25.59	1	0.4	86.1
26.97	2	0.8	86.9
28.96	1	0.4	87.3
31.78	4	1.6	89.0
35.17	2	0.8	89.8
35.39	1	0.4	90.2
37	2	0.8	91.0
40.25	1	0.4	91.4
41.33	2	0.8	92.2
42.52	1	0.4	92.7
43.78	1	0.4	93.1
47.38	2	0.8	93.9
48.73	1	0.4	94.3
51.03	1	0.4	94.7
51.58	2	0.8	95.5
52.25	2	0.8	96.3
58.53	1	0.4	96.7
59.38	2	0.8	97.6
60.77	2	0.8	98.4
68.63	1	0.4	98.8
69.93	2	0.8	99.6
81.76	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	245	SUM WGTS	245
MEAN	31.3251	SUM	7674.64
STD DEV	20.0694	VARIANCE	402.779
SKEWNESS	0.481122	KURTOSIS	-0.157649
USS	338687	CSS	98278.1
CV	64.0681	STD MEAN	1.28218
T:MEAN=0	24.431	PROB>|T|	0.0001
SGN RANK	12376.5	PROB>|S|	0.0001
NUM ¬= 0	222		
D:NORMAL	0.110879	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	84.8604
75% Q3	47.38	95%	66.42
50% MED	25.78	90%	59.38
25% Q1	17.14	10%	6.08
0% MIN	0	5%	0
		1%	0
RANGE	100		
Q3-Q1	30.24		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	145)	77.11(	138)
0(	145)	81.75(	114)
0(	144)	81.75(	114)
0(	137)	87.51(	41)
0(	110)	100(	24)

MISSING VALUE	.
COUNT	1
% COUNT/NOBS	0.41

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=MEDIUM

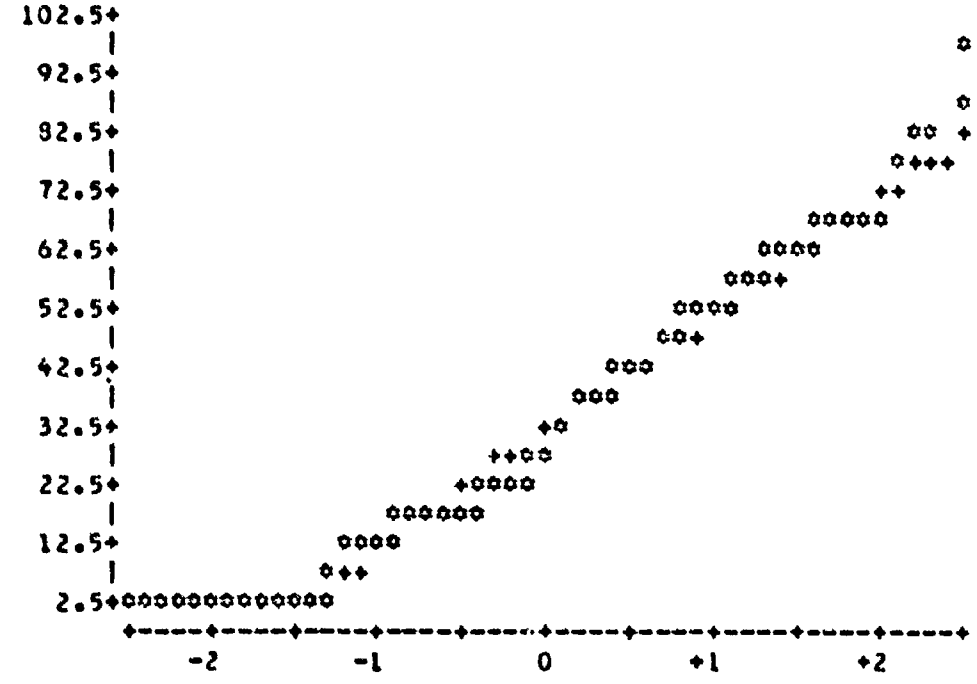
UNIVARIATE

VARIABLE=SWAT

STEM	LEAF	#	BOXPLOT
10	0	1	
9			0
9			
8	8	1	|
8	22	2	|
7	7	1	|
7	00000	5	|
6	6669	4	|
6	111111111	9	|
5	889999999	9	|
5	11111111222222222	17	|
4	77777779999999	14	+------+
4	0000022333333333334444	22	| |
3	55555555555555566666688	23	| |
3	1122222222	10	| + |
2	555666666666677	16	*------*
2	033333333333333333333344	26	| |
1	555555566666666677777777777777777777777777778	46	+------+
1	0000000000112	13	|
0	669	3	|
0	000000000000000000000	23	|

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	23	9.4	9.4	36.24	5	2.0	64.5
6.08	2	0.8	10.2	37.9	1	0.4	64.9
8.9	1	0.4	10.6	38.07	1	0.4	65.3
10.25	10	4.1	14.7	40.25	2	0.8	66.1
11.18	2	0.8	15.5	40.38	3	1.2	67.3
12.01	1	0.4	15.9	41.57	2	0.8	68.2
14.6	5	2.0	18.0	42.52	11	4.5	72.7
15.34	2	0.8	18.8	43.78	4	1.6	74.3
16.17	10	4.1	22.9	47.38	7	2.9	77.1
16.96	1	0.4	23.3	48.61	5	2.0	79.2
17.14	25	10.2	33.5	48.73	2	0.8	80.0
17.19	2	0.8	34.3	50.93	1	0.4	80.4
18.24	1	0.4	34.7	51.03	5	2.0	82.4
20.48	1	0.4	35.1	51.17	2	0.8	83.3
23.17	7	2.9	38.0	51.58	5	2.0	85.3
23.23	14	5.7	43.7	52.25	4	1.6	86.9
23.3	1	0.4	44.1	57.78	2	0.8	87.8
23.4	1	0.4	44.5	58.53	1	0.4	88.2
23.93	2	0.8	45.3	58.78	2	0.8	89.0
25.37	3	1.2	46.5	59.38	4	1.6	90.6
25.59	4	1.6	48.2	60.73	3	1.2	91.8
25.78	5	2.0	50.2	60.77	6	2.4	94.3
26.31	1	0.4	50.6	66.42	3	1.2	95.5
26.38	1	0.4	51.0	68.63	1	0.4	95.9
26.72	1	0.4	51.4	69.68	1	0.4	96.3
26.97	1	0.4	51.8	69.93	2	0.8	97.1
31.46	2	0.8	52.7	69.94	2	0.8	98.0
31.78	7	2.9	55.5	77.11	1	0.4	98.4
32.4	1	0.4	55.9	81.75	2	0.8	99.2
35.17	3	1.2	57.1	87.51	1	0.4	99.6
35.39	13	5.3	62.4	100	1	0.4	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	47.8519	SUM	11771.6
STD DEV	25.6699	VARIANCE	658.943
SKEWNESS	0.332627	KURTOSIS	-0.670652
USS	724732	CSS	161441
CV	53.6445	STD MEAN	1.63665
T:MEAN=0	29.2377	PROB>|T|	0.0001
SGN RANK	14460	PROB>|S|	0.0001
NUM ¬= 0	240		
D:NORMAL	0.0790402	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	100
75% Q3	63.1825	95%	99.51
50% MED	44.56	90%	87.84
25% Q1	25.59	10%	17.14
0% MIN	0	5%	14.6
		1%	0
RANGE	100		
Q3-Q1	37.5925		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	145)	100(	69)
0(	145)	100(	69)
0(	110)	100(	89)
0(	57)	100(	127)
0(	50)	100(	138)

UNIVARIATE SUMMARY FOR SWAT RATINGS

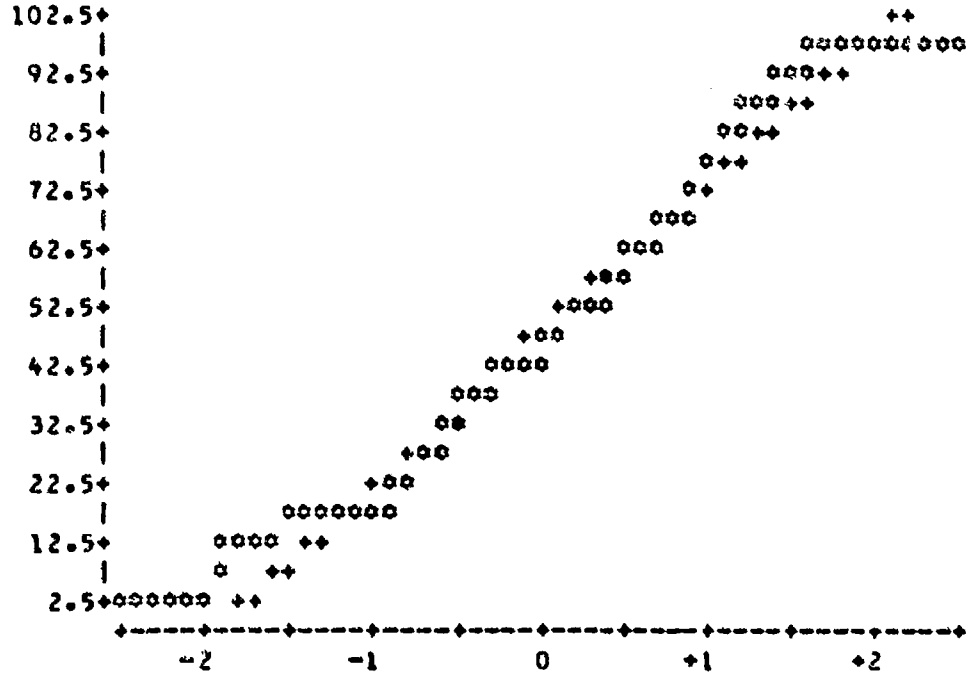
TASK=PM LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

```
STEM LEAF                                  #    BOXPLOT
  10 00000000000000                       14       |
   9                                               |
   9 11123                                  5       |
   8 88888999                               8       |
   8 112222344                              9       |
   7 577799                                 6       |
   7 0000000000000233                      16       |
   6 557                                    3       |
   6 001111111133                          12       +------+
   5 889999999999999                       15       |      |
   5 1111111222222222222                   20       |      |
   4 5555556777999999999                   19       |  +   |
   4 000000022333333333334444444           27       *------*
   3 555555555567778                       15       |      |
   3 122344                                 6       |      |
   2 556666666666678                       15       +------+
   2 333333333344                          12              |
   1 555566677777777777777777777777788     33              1
   1 0001                                   4              |
   0 6                                      1              |
   0 000000                                 6              |
     ----+----+----+----+----+----+---
  MULTIPLY STEM.LEAF BY 10**+01
```

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=PM LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM
0	6	2.4	2.4
6.08	1	0.4	2.8
10.25	3	1.2	4.1
11.18	1	0.4	4.5
14.6	4	1.6	6.1
16.17	3	1.2	7.3
16.96	1	0.4	7.7
17.14	19	7.7	15.4
17.19	1	0.4	15.9
17.45	3	1.2	17.1
18.24	2	0.8	17.9
23.17	2	0.8	18.7
23.23	8	3.3	22.0
23.93	2	0.8	22.8
25.37	2	0.8	23.6
25.59	5	2.0	25.6
25.78	3	1.2	26.8
25.99	1	0.4	27.2
26.31	1	0.4	27.6
26.38	1	0.4	28.0
26.97	1	0.4	28.5
27.63	1	0.4	28.9
30.76	1	0.4	29.3
31.78	2	0.8	30.1
32.79	1	0.4	30.5
33.72	2	0.8	31.3
35.17	3	1.2	32.5
35.39	7	2.8	35.4
36.24	1	0.4	35.8
36.63	3	1.2	37.0
37.9	1	0.4	37.4
40.25	1	0.4	37.8
40.28	2	0.8	38.6
40.38	4	1.6	40.2
41.57	2	0.8	41.1
42.52	11	4.5	45.5
43.78	6	2.4	48.0
43.83	1	0.4	48.4
44.56	6	2.4	50.8
45.72	1	0.4	51.2
47.38	3	1.2	52.4
48.61	7	2.8	55.3
48.73	2	0.8	56.1
50.93	3	1.2	57.3
51.03	4	1.6	58.9
51.58	4	1.6	60.6
51.69	6	2.4	63.0
52.25	3	1.2	64.2
57.78	2	0.8	65.0
58.53	2	0.8	65.9
58.78	3	1.2	67.1
59.38	8	3.3	70.3
60.16	2	0.8	71.1
60.73	1	0.4	71.5
60.77	7	2.8	74.4
62.62	2	0.8	75.2
64.87	2	0.8	76.0
66.67	1	0.4	76.4
69.68	1	0.4	76.8
69.82	1	0.4	77.2
69.93	5	2.0	79.3
69.94	6	2.4	81.7
71.51	1	0.4	82.1
72.58	1	0.4	82.5
73.03	1	0.4	82.9
75.14	1	0.4	83.3
77.11	3	1.2	84.6
78.67	1	0.4	85.0
79.37	1	0.4	85.4
81.39	2	0.8	86.2
81.75	2	0.8	87.0
82.09	2	0.8	87.8
83.25	1	0.4	88.2
83.62	2	0.8	89.0
87.51	1	0.4	89.4
87.84	4	1.6	91.1
88.96	3	1.2	92.3
90.83	3	1.2	93.5
91.52	1	0.4	93.9
92.8	1	0.4	94.3
99.51	4	1.6	95.9
100	10	4.1	100.0

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	7.18963	SUM	1768.65
STD DEV	14.6637	VARIANCE	215.025
SKEWNESS	2.96816	KURTOSIS	10.8323
USS	65397.1	CSS	52681.1
CV	203.957	STD MEAN	0.934925
T:MEAN=0	7.69006	PROB>|T|	0.0001
SGN RANK	1580	PROB>|S|	0.0001
NUM ^= 0	79		
D:NORMAL	0.366901	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	75.434
75% Q3	8.585	95%	40.473
50% MED	0	90%	23.281
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	8.585		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	148)	52.25(	148)
0(	146)	59.38(	55)
0(	146)	69.71(	18)
0(	145)	80.51(	17)
0(	145)	99.51(	41)

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=LOW

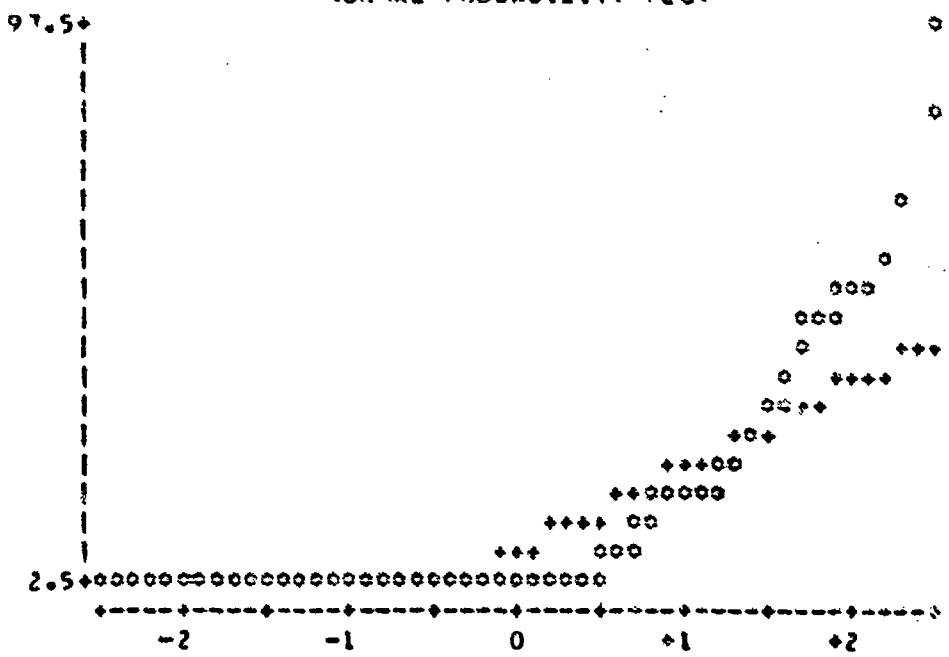
UNIVARIATE

VARIABLE=SWAT

HISTOGRAM	#	BOXPLOT
97.5+*	1	*
.		
.		
.*	1	*
.		
.		
.*	1	*
.		
.*	1	*
.*	3	*
.*	4	*
.*	1	*
.*	2	*
.*	4	0
.*	4	0
.**	8	0
.*****	20	|
.***	9	|
.*****	20	+--+--+
2.5+**********************************	167	*------*

* MAY REPRESENT UP TO 4 COUNTS

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	PERCENTS CUM	VALUE	COUNT	PERCENTS CELL	PERCENTS CUM
0	167	67.9	67.9	23.4	2	0.8	91.1
6.08	10	4.1	72.0	25.37	1	0.4	91.5
7	3	1.2	73.2	25.99	3	1.2	92.7
8.48	5	2.0	75.2	31.78	4	1.6	94.3
8.9	2	0.8	76.0	35.39	2	0.8	95.1
10.25	2	0.8	76.8	43.21	1	0.4	95.5
10.44	2	0.8	77.6	47.38	2	0.8	96.3
11.18	4	1.6	79.3	48.61	2	0.8	97.2
12.01	1	0.4	79.7	51.58	2	0.8	98.0
15.34	1	0.4	80.1	52.25	1	0.4	98.4
16.17	5	2.0	82.1	59.38	1	0.4	98.8
17.14	9	3.7	85.8	69.71	1	0.4	99.2
18.24	5	2.0	87.8	80.51	1	0.4	99.6
23.17	4	1.6	89.4	99.51	1	0.4	100.0
23.23	2	0.8	90.2				

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	18.4499	SUM	4538.68
STD DEV	17.6105	VARIANCE	310.128
SKEWNESS	1.07523	KURTOSIS	1.46538
USS	159720	CSS	75981.4
CV	95.45	STD MEAN	1.1228
T:MEAN=0	16.432	PROB>|T|	0.0001
SGN RANK	7525.5	PROB>|S|	0.0001
NUM ¬= 0	173		
D:NORMAL	0.163793	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	71.2322
75% Q3	27.1375	95%	51.3875
50% MED	17.14	90%	43.78
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	27.1375		
MODE	0		

EXTREMES

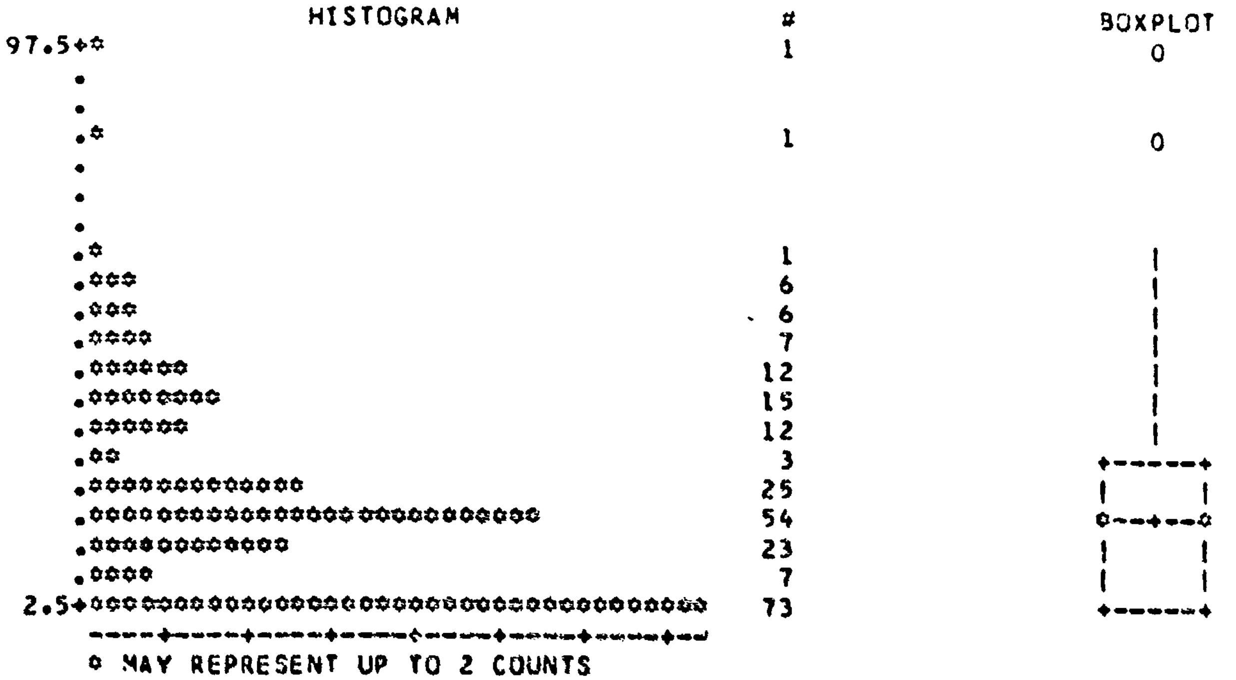
LOWEST	ID	HIGHEST	ID
0(	146)	58.78(	66)
0(	145)	59.38(	55)
0(	145)	60.77(	121)
0(	144)	80.51(	17)
0(	144)	99.51(	41)

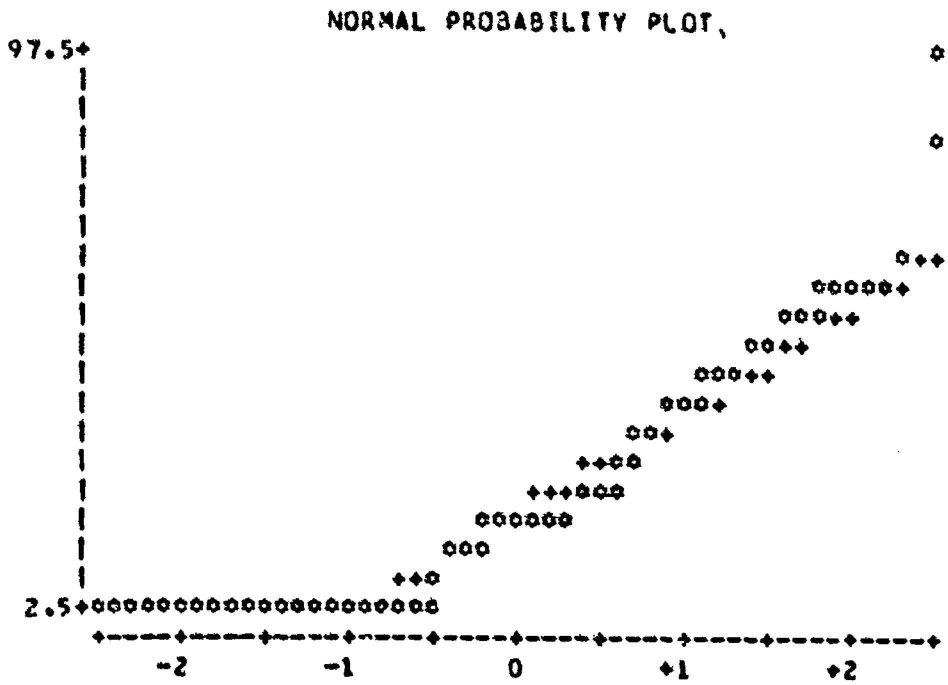
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT





UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	73	29.7	29.7	37	2	0.8	85.8
6.08	2	0.8	30.5	37.9	1	0.4	86.2
7	2	0.8	31.3	40.25	3	1.2	87.4
8.48	1	0.4	31.7	40.38	1	0.4	87.8
8.9	2	0.8	32.5	41.33	1	0.4	88.2
10.25	15	6.1	38.6	42.52	4	1.6	89.8
10.44	3	1.2	39.8	43.78	3	1.2	91.1
11.18	2	0.8	40.7	47.38	2	0.8	91.9
12.01	1	0.4	41.1	48.61	4	1.6	93.5
14.6	2	0.8	41.9	48.73	1	0.4	93.9
16.17	11	4.5	46.3	51.03	3	1.2	95.1
17.14	42	17.1	63.4	51.58	1	0.4	95.5
18.24	1	0.4	63.8	52.25	2	0.8	96.3
23.17	9	3.7	67.5	57.78	1	0.4	96.7
23.23	16	6.5	74.0	57.93	2	0.8	97.6
25.59	1	0.4	74.4	58.53	1	0.4	98.0
25.78	2	0.8	75.2	58.78	1	0.4	98.4
31.21	1	0.4	75.6	59.38	1	0.4	98.8
31.46	1	0.4	76.0	60.77	1	0.4	99.2
31.78	10	4.1	80.1	80.51	1	0.4	99.6
35.39	6	2.4	82.5	99.51	1	0.4	100.0
36.24	6	2.4	85.0				

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	243	SUM WGTS	243
MEAN	24.7949	SUM	6025.15
STD DEV	19.9412	VARIANCE	397.65
SKEWNESS	0.820993	KURTOSIS	0.250771
USS	245624	CSS	96231.3
CV	80.4246	STD MEAN	1.27923
T:MEAN=0	19.3827	PROB>|T|	0.0001
SGN RANK	10353	PROB>|S|	0.0001
NUM ^= 0	203		
D:NORMAL	0.172097	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	99.51	99%	79.014
75% Q3	37	95%	60.77
50% MED	17.14	90%	52.25
25% Q1	10.25	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	99.51		
Q3-Q1	26.75		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	145)	75.14(	125)
0(	145)	76.96(	6)
0(	141)	77.11(	140)
0(	134)	80.51(	17)
0(	132)	99.51(	41)

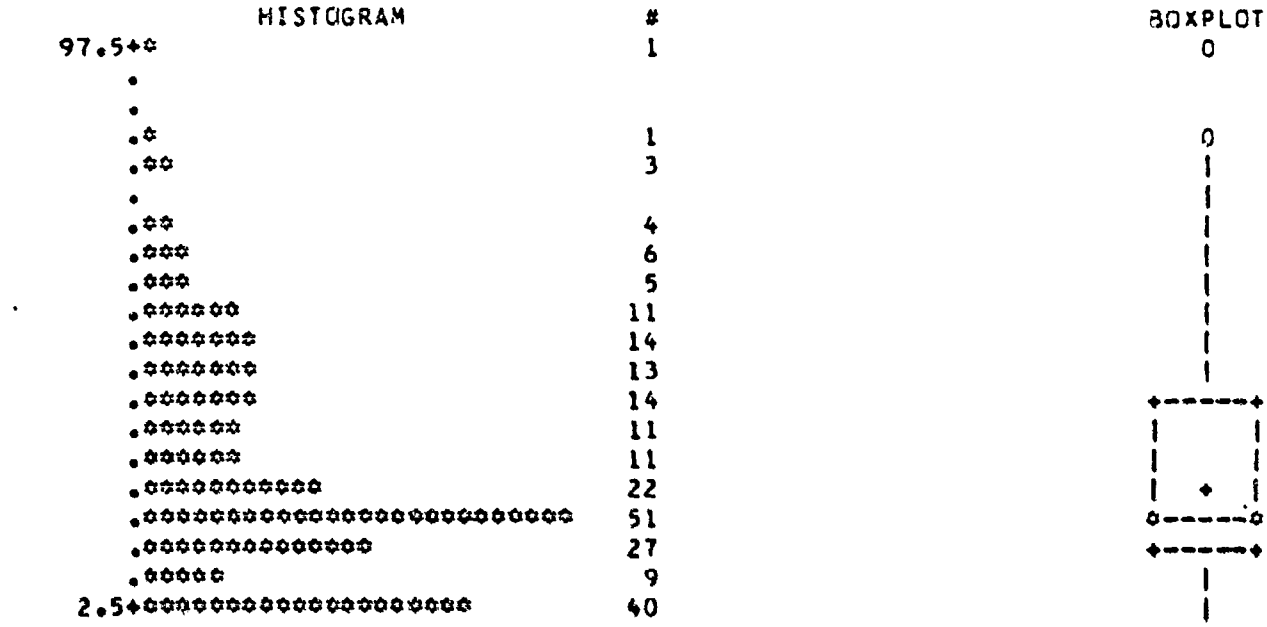
MISSING VALUE	.
COUNT	3
% COUNT/NOBS	1.22

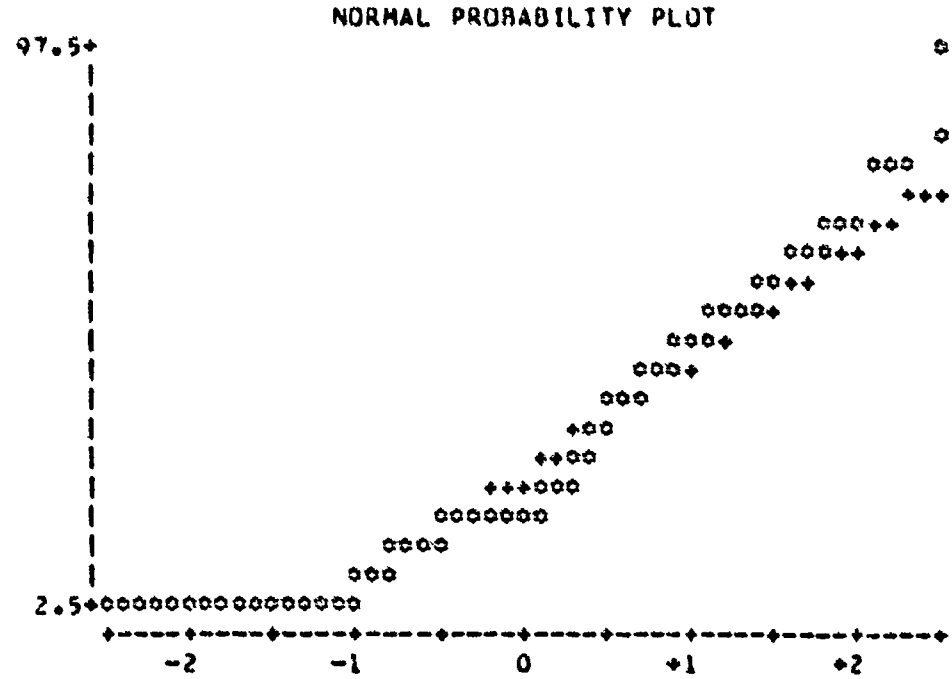
UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT





USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=SP LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	40	16.5	16.5	43.44	1	0.4	79.6
6.08	4	1.6	18.1	43.78	4	1.6	80.2
7	3	1.2	19.3	44.56	3	1.2	81.5
8.48	2	0.8	20.2	47.38	5	2.1	83.5
10.25	18	7.4	27.6	47.44	2	0.8	84.4
10.44	2	0.8	28.4	48.61	6	2.5	86.8
11.18	1	0.4	28.8	49.08	1	0.4	87.2
12.01	1	0.4	29.2	51.03	1	0.4	87.7
14.6	5	2.1	31.3	51.58	2	0.8	88.5
16.17	12	4.9	36.2	51.69	1	0.4	88.9
17.14	39	16.0	52.3	52.25	5	2.1	90.9
23.17	9	3.7	56.0	52.37	1	0.4	91.4
23.23	11	4.5	60.5	54.67	1	0.4	91.8
23.4	1	0.4	60.9	57.78	2	0.8	92.6
23.93	1	0.4	61.3	58.78	1	0.4	93.0
25.37	1	0.4	61.7	58.87	1	0.4	93.4
25.59	1	0.4	62.1	59.38	1	0.4	93.3
25.78	8	3.3	65.4	60.77	5	2.1	95.9
26.31	1	0.4	65.8	63.14	1	0.4	96.3
31.21	1	0.4	66.3	66.42	2	0.8	97.1
31.46	1	0.4	66.7	69.64	1	0.4	97.5
31.78	9	3.7	70.4	69.94	1	0.4	97.9
35.39	7	2.9	73.3	75.14	1	0.4	98.4
36.24	4	1.6	74.9	76.96	1	0.4	98.8
37	2	0.8	75.7	77.11	1	0.4	99.2
37.9	1	0.4	76.1	80.51	1	0.4	99.6
40.38	1	0.4	76.5	99.51	1	0.4	100.0
42.52	4	1.6	78.2				

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	245	SUM WGTS	245
MEAN	19.4794	SUM	4772.45
STD DEV	20.2398	VARIANCE	409.651
SKEWNESS	0.900963	KURTOSIS	0.0855333
USS	192919	CSS	99955
CV	103.904	STD MEAN	1.29308
T:MEAN=0	15.0644	PROB>|T|	0.0001
SGN RANK	6440	PROB>|S|	0.0001
NUM ¬= 0	160		
D:NORMAL	0.179021	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	81.76	99%	80.51
75% Q3	35.17	95%	59.38
50% MED	16.96	90%	48.658
25% Q1	0	10%	0
0% MIN	0	5%	0
		1%	0
RANGE	81.76		
Q3-Q1	35.17		
MODE	0		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	148)	69.93(	27)
0(	146)	79.37(	86)
0(	146)	80.51(	17)
0(	144)	80.51(	41)
0(	144)	81.76(	24)

MISSING VALUE	.
COUNT	1
% COUNT/NOBS	0.41

UNIVARIATE SUMMARY FOR SWAT RATINGS

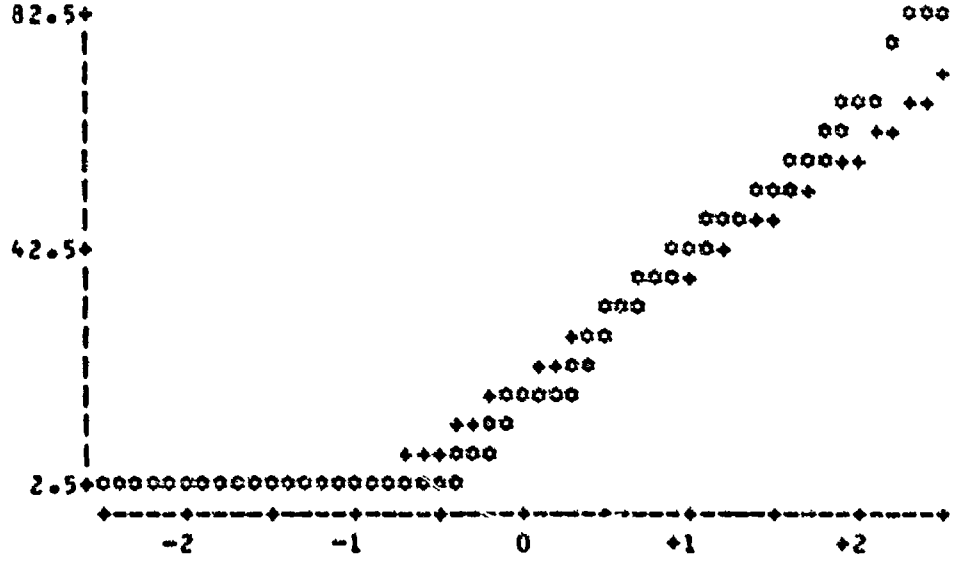
TASK=UT LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

```
                HISTOGRAM                    #        BOXPLOT
  82.5+**                                    3           |
      .*                                     1           |
      .                                                  |
      .**                                    3           |
      .*                                     2           |
      .***                                   5           |
      .****                                  8           |
      .******                               11           |
  42.5+******                               12           |
      .**********                           17          +------+
      .*****                                10          |      |
      .*******                              14          |      |
      .******                               11          |      |
      .******************                   33          *---+---*
      .******                               11          |      |
      .**********                           19          |      |
   2.5+**************************************** 85      +------+
      ----+-----+-----+-----+-----+-----+-----+-----+----
      * MAY REPRESENT UP TO 2 COUNTS
```

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=LOW

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	85	34.7	34.7	35.39	6	2.4	78.4
6.08	12	4.9	39.6	36.24	4	1.6	80.0
7	3	1.2	40.8	36.63	1	0.4	80.4
8.48	4	1.6	42.4	37	1	0.4	80.8
10.25	5	2.0	44.5	38.07	2	0.8	81.6
10.44	1	0.4	44.9	40.25	1	0.4	82.0
12.01	1	0.4	45.3	40.38	2	0.8	82.9
12.96	1	0.4	45.7	41.33	2	0.8	83.7
14.6	3	1.2	46.9	41.57	2	0.8	84.5
16.17	7	2.9	49.8	42.52	3	1.2	85.7
16.96	2	0.8	50.6	43.62	1	0.4	86.1
17.14	13	5.3	55.9	43.78	1	0.4	86.5
18.24	10	4.1	60.0	45.72	1	0.4	86.9
19	1	0.4	60.4	47.38	3	1.2	88.2
23.17	2	0.8	61.2	48.61	5	2.0	90.2
23.23	5	2.0	63.3	48.73	2	0.8	91.0
23.3	1	0.4	63.7	50.27	2	0.8	91.8
23.93	2	0.8	64.5	51.17	1	0.4	92.2
24.21	1	0.4	64.9	51.58	3	1.2	93.5
25.37	5	2.0	66.9	52.25	1	0.4	93.9
25.59	1	0.4	67.3	53.79	1	0.4	94.3
25.99	5	2.0	69.4	58.53	1	0.4	94.7
26.31	1	0.4	69.8	59.38	4	1.6	96.3
26.97	1	0.4	70.2	60.77	1	0.4	96.7
28.96	1	0.4	70.6	64.87	1	0.4	97.1
31.46	3	1.2	71.8	66.42	2	0.8	98.0
31.78	5	2.0	73.9	69.93	1	0.4	98.4
32.4	1	0.4	74.3	79.37	1	0.4	98.8
32.79	1	0.4	74.7	80.51	2	0.8	99.6
35.17	3	1.2	75.9	81.76	1	0.4	100.0

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	43.2076	SUM	10629.1
STD DEV	25.7134	VARIANCE	661.181
SKEWNESS	0.329366	KURTOSIS	-0.53002
USS	621245	CSS	161989
CV	59.5114	STD MEAN	1.63943
T:MEAN=0	26.3553	PROB>|T|	0.0001
SGN RANK	13282.5	PROB>|S|	0.0001
NUM ¬= 0	230		
D:NORMAL	0.0588564	PROB>D	0.037

QUANTILES(DEF=4)

100% MAX	100	99%	100
75% Q3	60.74	95%	90.1755
50% MED	42.045	90%	81.76
25% Q1	23.23	10%	10.383
0% MIN	0	5%	0
		1%	0
RANGE	100		
Q3-Q1	37.51		
MODE	17.14		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	134)	100(	24)
0(	76)	100(	70)
0(	75)	100(	70)
0(	75)	100(	111)
0(	58)	100(	122)

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=MEDIUM

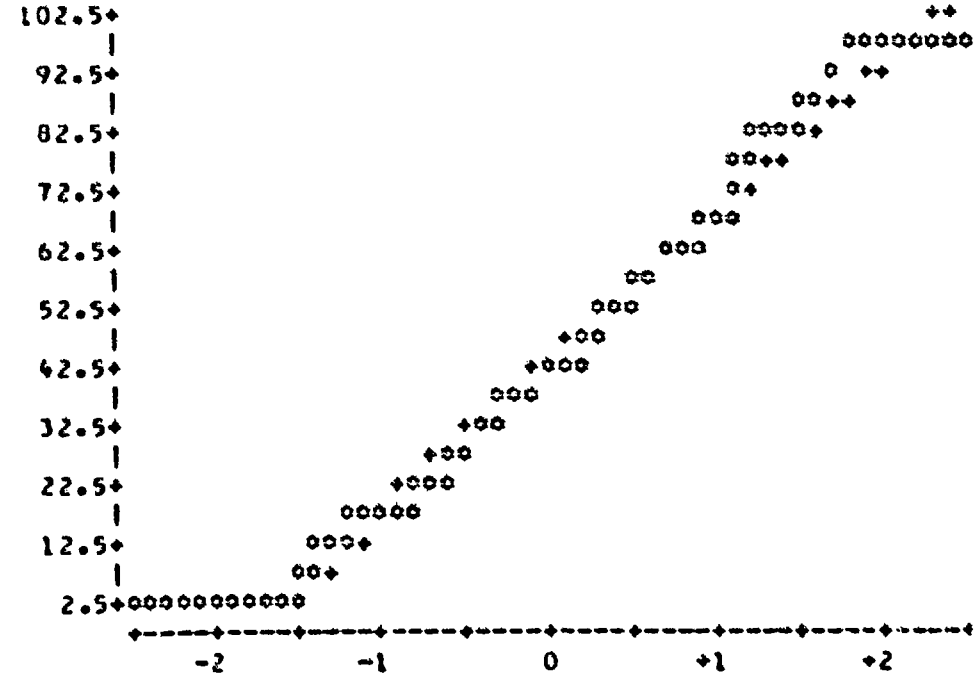
UNIVARIATE

VARIABLE=SWAT

STEM	LEAF	#	BOXPLOT
10	0000000000	10	
9			
9	13	2	
8	88889	5	
8	11222222244	11	
7	7799	4	
7	0000000000034	13	
6	5555677	7	
6	11111111134	11	
5	66888999999999	14	
5	1111222222222	13	
4	5555777779999999999	19	
4	0022233333444444444	19	
3	55555555555555666677788888	28	
3	1122222223	10	
2	5556666667799	13	
2	03333333333344	14	
1	55566677777777777777777778	27	
1	00002	5	
0	66688	5	
0	0000000000000000	16	

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=MEDIUM

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	16	6.5	6.5	47.38	4	1.6	58.9
6.08	3	1.2	7.7	47.44	1	0.4	59.3
8.48	2	0.8	8.5	48.61	6	2.4	61.8
10.25	3	1.2	9.8	48.73	1	0.4	62.2
10.44	1	0.4	10.2	49.08	3	1.2	63.4
12.01	1	0.4	10.6	51.03	4	1.6	65.0
14.6	3	1.2	11.8	51.58	5	2.0	67.1
16.17	3	1.2	13.0	51.69	1	0.4	67.5
16.96	1	0.4	13.4	52.25	2	0.8	68.3
17.14	19	7.7	21.1	52.37	1	0.4	68.7
18.24	1	0.4	21.5	56.17	2	0.8	69.5
20.48	1	0.4	22.0	57.78	3	1.2	70.7
23.17	5	2.0	24.0	58.78	4	1.6	72.4
23.23	6	2.4	26.4	59.38	5	2.0	74.4
23.93	2	0.8	27.2	60.73	2	0.8	75.2
25.37	3	1.2	28.5	60.77	7	2.8	78.0
25.59	1	0.4	28.9	62.62	1	0.4	78.5
25.78	2	0.8	29.7	64.19	1	0.4	78.9
26.31	3	1.2	30.9	64.87	4	1.6	80.5
26.72	1	0.4	31.3	66.42	1	0.4	80.9
26.97	1	0.4	31.7	66.67	2	0.8	81.7
28.96	1	0.4	32.1	69.93	5	2.0	83.7
29.1	1	0.4	32.5	69.94	6	2.4	86.2
31.46	2	0.8	33.3	73.03	1	0.4	86.6
31.78	3	1.2	34.6	73.68	1	0.4	87.0
32.4	4	1.6	36.2	76.96	1	0.4	87.4
32.79	1	0.4	36.6	77.11	1	0.4	87.8
35.17	1	0.4	37.0	78.67	1	0.4	88.2
35.39	14	5.7	42.7	79.37	1	0.4	88.6
36.24	4	1.6	44.3	80.51	2	0.8	89.4
36.63	2	0.8	45.1	81.75	1	0.4	89.8
36.86	1	0.4	45.5	81.76	4	1.6	91.5
37.9	3	1.2	46.7	82.09	2	0.8	92.3
38.07	3	1.2	48.0	83.62	2	0.8	93.1
40.25	1	0.4	48.4	87.51	3	1.2	94.3
40.38	1	0.4	48.8	87.84	1	0.4	94.7
41.57	3	1.2	50.0	88.96	1	0.4	95.1
42.52	5	2.0	52.0	90.83	1	0.4	95.5
43.62	1	0.4	52.4	92.8	1	0.4	95.9
43.78	7	2.8	55.3	99.51	5	2.0	98.0
43.83	1	0.4	55.7	100	5	2.0	100.0
44.56	4	1.6	57.3				

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

MOMENTS

N	246	SUM WGTS	246
MEAN	62.368	SUM	15342.5
STD DEV	28.38	VARIANCE	805.425
SKEWNESS	-0.380209	KURTOSIS	-0.753164
USS	1154213	CSS	197329
CV	45.5041	STD MEAN	1.80944
T:MEAN=0	34.4681	PROB>|T|	0.0001
SGN RANK	13983	PROB>|S|	0.0001
NUM ^= 0	236		
D:NORMAL	0.0924189	PROB>D	<.01

QUANTILES(DEF=4)

100% MAX	100	99%	100
75% Q3	87.51	95%	100
50% MED	64.87	90%	100
25% Q1	42.52	10%	21.691
0% MIN	0	5%	12.9165
		1%	0
RANGE	100		
Q3-Q1	44.99		
MODE	100		

EXTREMES

LOWEST	ID	HIGHEST	ID
0(	89)	100(	127)
0(	76)	100(	133)
0(	75)	100(	138)
0(	58)	100(	145)
0(	58)	100(	145)

USAF/SCEEE LARGE-SCALE CTS STUDY

UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=HIGH

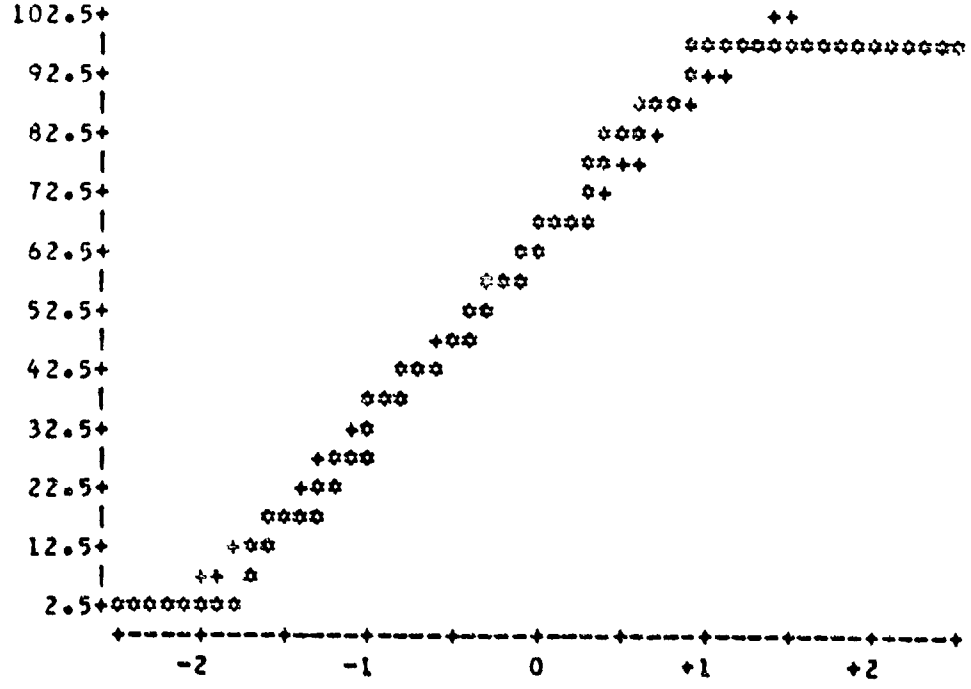
UNIVARIATE

VARIABLE=SWAT

STEM	LEAF	#	BOXPLOT
10	0000000000000000000000000000000000000000000	43	
9			
9	111333	6	
8	688888899999999	15	
8	11122222223333344444	20	
7	7777999	7	
7	00000000000000000000002233333	28	
6	55558	5	
6	01111111124	11	
5	555888888999999	15	
5	01112222222222	14	
4	5555556677999999	16	
4	022233334444	12	
3	5555555 77788888	15	
3	33	2	
2	55566667	8	
2	33344	5	
1	577777777788	12	
1	2	1	
0	8	1	
0	0000000000	10	

MULTIPLY STEM.LEAF BY 10**+01

NORMAL PROBABILITY PLOT



UNIVARIATE SUMMARY FOR SWAT RATINGS

TASK=UT LEVEL=HIGH

UNIVARIATE

VARIABLE=SWAT

FREQUENCY TABLE

VALUE	COUNT	PERCENTS CELL	CUM	VALUE	COUNT	PERCENTS CELL	CUM
0	10	4.1	4.1	55.43	1	0.4	40.2
8.48	1	0.4	4.5	57.78	2	0.8	41.1
12.01	1	0.4	4.9	57.93	4	1.6	42.7
14.6	1	0.4	5.3	58.78	3	1.2	43.9
16.96	1	0.4	5.7	59.38	3	1.2	45.1
17.14	6	2.4	8.1	60.16	1	0.4	45.5
17.45	2	0.8	8.9	60.73	1	0.4	45.9
18.24	2	0.8	9.8	60.77	7	2.8	48.8
23.17	1	0.4	10.2	61.52	1	0.4	49.2
23.23	2	0.8	11.0	63.58	1	0.4	49.6
23.93	2	0.8	11.8	64.87	4	1.6	51.2
25.37	3	1.2	13.0	68.43	1	0.4	51.6
25.59	3	1.2	14.2	69.82	2	0.8	52.4
26.31	1	0.4	14.6	69.93	4	1.6	54.1
26.72	1	0.4	15.0	69.94	14	5.7	59.8
32.79	2	0.8	15.9	69.96	1	0.4	60.2
35.17	3	1.2	17.1	71.51	2	0.8	61.0
35.39	4	1.6	18.7	72.58	4	1.6	62.6
36.63	3	1.2	19.9	73.03	1	0.4	63.0
37.9	3	1.2	21.1	77.11	4	1.6	64.6
38.07	2	0.8	22.0	78.67	2	0.8	65.4
40.28	1	0.4	22.4	79.37	1	0.4	65.9
41.57	3	1.2	23.6	80.51	2	0.8	66.7
42.52	4	1.6	25.2	81.39	1	0.4	67.1
43.78	4	1.6	26.8	81.75	5	2.0	69.1
44.56	6	2.4	29.3	82.09	2	0.8	69.9
45.72	2	0.8	30.1	82.55	2	0.8	70.7
47.38	2	0.8	30.9	83.05	3	1.2	72.0
48.61	5	2.0	32.9	83.62	5	2.0	74.0
49.08	1	0.4	33.3	86.43	1	0.4	74.4
50.27	1	0.4	33.7	87.51	3	1.2	75.6
50.93	1	0.4	34.1	87.84	3	1.2	76.8
51.03	2	0.8	35.0	88.96	8	3.3	80.1
51.58	3	1.2	36.2	90.83	3	1.2	81.3
51.69	5	2.0	38.2	92.8	3	1.2	82.5
52.25	2	0.8	39.0	99.51	10	4.1	86.6
54.67	2	0.8	39.8	100	33	13.4	100.0